

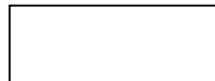


**PREPARING AIR FORCE MOBILITY
EXPERTS FOR
HUMANITARIAN ASSISTANCE AND
DISASTER RELIEF**

GRADUATE RESEARCH PROJECT

Thomas C. Gilster, Major, USAF

AFIT/GMO/ENS/01E-04



**DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY**

AIR FORCE INSTITUTE OF TECHNOLOGY

Wright-Patterson Air Force Base, Ohio

Approved for Public Release; Distribution Unlimited

The views expressed in this graduate research paper are those of the author and do not reflect official policy of the position of the United States Air Force, Department of Defense or US Government.

AFIT/GMO/ENS/01E-04

PREPARING AIR FORCE MOBILITY EXPERTS FOR
HUMANITARIAN ASSISTANCE
&
DISASTER RELIEF

GRADUATE RESEARCH PAPER

Presented to faculty of the Graduate School of
Engineering and Management of the
Air Force Institute of Technology
Air University

Air Education and Training Command

In Partial Fulfillment of the Requirement for Degree of
Masters of Air Mobility

Thomas C. Gilster, B.S., M.A.

Major, USAF

June 2001

PREPARING AIR FORCE MOBILITY EXPERTS FOR
HUMANITARIAN ASSISTANCE
&
DISASTER RELIEF

Thomas C. Gilster, B.S., M.A
Major, USAF.

Approved:

Stephan P. Brady (Advisor)

Date

Training IS.....

“A human being is a product of two basic factors: heredity and training. Since heredity can not be altered after the fact, training is the only important variable in human success. There is nothing training can not do. The essential thing is to get good training instead of bad training.”

Mark Twain

Acknowledgments

I would like to first express my appreciation to Air Mobility Command, the Air Mobility Warfare Center, and the Air Force Institute of Technology for maintaining Gen Ronald Fogleman's vision of a program dedicated to promoting the craft of air mobility. This year has been an exceptional learning experience.

Second, I would like to thank Lt Gen Joseph H. Wehrle Jr., Lt Col Steven Dreyer, Lt Col Michael O'Brien, Dr. Robert Sligh and the rest of the staff from Third Air Force, USAFE, for their support in my research. I would also like to thank friend and colleague Major Greg Hermsmeyer and father Col (Ret.) Herman L. Gilster (Phd.) for their timely critiques and insights into my research.

Finally, I would like to thank my biggest supporters, my wife and kids for their endless patience through sleepless nights and lost weekends.

Thomas C. Gilster

Table of Contents

ACKNOWLEDGMENTS.....	VI
LIST OF FIGURES.....	IX
LIST OF TABLES.....	X
ABSTRACT	XI
CHAPTER 1 INTRODUCTION.....	1
1.1 RESEARCH QUESTIONS	1
1.2 ESTABLISHING THE PARAMETERS OF RESEARCH.....	3
1.3 DEFINING HA/DR FOR THE USAF	6
1.4 RESEARCH APPROACH	9
1.5 RESEARCH OBJECTIVE AND OUTLINE	10
CHAPTER 2.0 LITERATURE REVIEW.....	13
2.1 PUBLISHED LITERATURE.....	13
2.2 UNPUBLISHED LITERATURE	25
2.3 CONCLUSION	26
CHAPTER 3.0 METHODOLOGY.....	27
3.1 INTERVIEWS	27
3.2 EXPLORATORY SURVEY	30
3.3 CONCLUSION	32
4.0 CASE STUDY OF MOZAMBIQUE	33
4.1 THE FLOODING OF MOZAMBIQUE...A BRIEF HISTORY	33
4.2 USAF OPERATIONS IN MOZAMBIQUE	38
4.3 LESSONS LEARNED FROM JTF-AR.....	49
4.4 CONCLUSION	53
CHAPTER 5.0 USAF OPERATIONS DURING HA/DR.....	55
5.1 SETTING THE STAGE.....	55
5.2 USAF ENGAGEMENT IN HUMANITARIAN INTERVENTION	57
5.3 USAF INTEGRATION INTO HA/DR JTFs	61
5.4 A TEMPLATE FOR DEVELOPING MOBILITY EXPERTS FOR HA/DR	68
5.5 CONCLUSION	78
CHAPTER 6.0 DEVELOPMENT OF KSAS FOR HA/DR	80
6.1 A CASE FOR THE UNIQUE KSAS	81
6.2 KSAS FOR THE MOBILITY EXPERTS	84
<i>The Cultural Divide Between HA/DR Players</i>	84
<i>Uniqueness of a HA/DR JTF</i>	92
<i>Understanding the HA/DR Region</i>	100
<i>Development of Field Experience</i>	102
6.3 CONCLUSION	105
CHAPTER 7.0 CONCLUSION.....	106
7.1 AVAILABILITY OF TRAINING FOR USAF MOBILITY EXPERTS	108

7.2 RECOMMENDATIONS FOR FURTHER RESEARCH	112
APPENDIX A EXPLORATORY SURVEYS	117
END NOTES	123
BIBIOGRAPHY	124

List of Figures

Figure 1-1: Range of Military Operations,	7
Figure 4-1: Map of Mozambique	35
Figure 4-2: JTF-AR Bed-down.....	42
Figure 6-1: Swarming of NGOs	85
Figure 6-2: The Humanitarian Environment,	93

List of Tables

Table 2-1 Joint Publications Referencing HA/DR.....	14
Table 6-1: Evaluating the Cultural Divide,	87

Abstract

The US military's response to the devastation two cyclones levied on the South African nation of Mozambique—officially known as Joint Task Force-ATLAS RESPONSE (JTF-AR)—was a watershed event for U.S. Air Force (USAF) employment in disaster relief. The success of this Third Air Force-led JTF provides insight that training USAF mobility experts specifically for humanitarian assistance and disaster relief (HA/DR) enhances the timely attainment of the JTF's objectives and furthers the relief effort. This paper examines whether the USAF should pursue providing its mobility experts with the distinct knowledge, skills, and abilities (KSAs) needed to facilitate effective and efficient integration of airlift resources into HA/DR operations.

This research indicate that the USAF should train its mobility experts to provide a greater understanding of: 1) the humanitarian environment and the players in it, 2) the roles and missions of a JTF established for HA/DR operations, 3) the culture, economics, and society of the region they could deploy to, and 4) the unique demands the HA/DR environment places on mobility experts and their core competency of rapid global mobility. These four areas constitute the KSAs unique to HA/DR operations and the key areas where USAF mobility forces should receive training to support HA/DR JTFs.

Since it is almost unimaginable to envision a US military engagement that does not include government agencies, humanitarian aid agencies, and foreign militaries, these four KSAs outlined above will not only enhance a JTF focused

on HA/DR, but they will also improve USAF readiness for any operation including war.

Chapter 1 Introduction

In March 2000, the world community rose up to respond to the devastation two cyclones and the accompanying flooding levied on the South African nation of Mozambique. The US military response, officially known as Joint Task Force-ATLAS RESPONSE (JTF-AR) led by the U.S. Air Force (USAF), was a watershed event for USAF employment in a disaster response. While the Berlin Airlift foreshadowed the significant extent to which USAF capabilities could be utilized in a humanitarian assistance/disaster relief (HA/DR) mission, only recently has the pivotal role USAF personnel and assets can play as the lead agency for US military response to disaster crises become clear (Irvin,1996:no-page). As the USAF's scope of responsibilities expands to provide assistance to the international community, so must the breadth of knowledge, skills, and abilities (KSA) of its forces. No longer can USAF mobility experts expect to deploy and work solely with other military forces. Rather, USAF mobility experts must integrate airlift operations into a HA/DR environment in which the proliferation of government and non-government agencies dramatically influences the military's tactical operations. This paper explores whether the USAF should provide its mobility experts distinct KSAs to facilitate more effective and efficient integration of airlift resources into HA/DR operations.

1.1 Research Questions

It is this author's contention that while USAF mobility experts are highly skilled and exceedingly motivated to provide critical support for

thousands devastated by natural or man made disasters, they lack the necessary KSAs instrumental in facilitating effective and efficient integration of airlift capabilities into HA/DR crises. While many argue that USAF mobility experts possess KSAs transferable between all levels of conflict, the unique environment present in a humanitarian crisis, with US or foreign government agencies (GOs), the United Nations (UN), international regional organizations (IOs), non-governmental organizations (NGOs), private voluntary organizations (PVOs), and the indigenous population, challenge mobility expert's ability to implement an effective airlift response during a HA/DR operation.

The successful response by the USAF to the Mozambique tragedy demonstrates its role as a primary planning and execution agency for the US military during humanitarian or disaster crises (IHAWG, 2000). Based on this operation's success, this research paper examines the impact that trained USAF mobility experts have on the US military's HA/DR operations and what KSAs USAF mobility experts should develop and apply to future USAF participation in relief operations. To achieve this objective, two research questions have been developed:

1. Why should the USAF mobility experts develop unique KSAs for employment in HA/DR operations?
2. What KSAs must USAF mobility experts develop to facilitate airlift integration in future disaster relief operations?

Answering these two research questions will validate the premise that the USAF should train its mobility experts with distinct KSA to promote effective and efficient integration of airlift operations into disaster response operations. Although each HA/DR is different and requires a unique response, common elements recur during each crisis. From a operational perspective, clarifying these elements and standardizing recurring processes through training will speed response and reduce costs to the military and the US government (FFDRP, 2000:n-page). From a tactical perspective, a cadre of trained USAF mobility experts will provide the joint task force (JTF) commander the tools to enhance unity of effort, create synergy of operations, and facilitate achievement of the end state triggers to meet the military's exit strategy (Wehrle, 2000:interview; Greco, 1995:1).

1.2 Establishing the Parameters of Research

The scope of this research paper focuses on those mobility experts that assist and operate in the JTF at the operational and tactical level as defined by Joint Publication 3-08, Interagency Coordination During Joint Operations, (Joint Pub 3-08, 1996;figure III-2). These USAF mobility experts include members of theater unified commands, numbered air forces or major commands staffs who deploy to serve on the JTF staff or who coordinate operations for the military in the humanitarian relief centers as well as those USAF mobility forces who serve in traditional cargo handling and movement role during operations execution. This research paper does not advocate the development of an USAF cadre to serve across a wide range of specialties during the US military's crisis response.

Rather the research paper proposes to train USAF mobility experts that compliment the skills and abilities of those highly skilled personnel from other services who serve during a humanitarian response. Trained mobility specialists are not necessary for every operation, but in all occasions, the staff should possess a breadth of military experience capable of integrating military capabilities to the IO/NGO community and vice versa (Civil-Military Operations, 2000;n-page). When USAF intratheater assets are deployed to an operation, well-trained, highly skilled USAF mobility experts should accompany the deployment to obtain great military synergy of operations.

A second point important to developing KSAs for HA/DR involves the roles and responsibilities of the JTF and its relationship to the HA/DR. It cannot be emphasized enough that the function of the JTF is to assist the international community in HA/DR response. All the literature and every interview conducted during this research reinforce the position of the military as one of support-not as the lead agency in HA/DR. The humanitarian community often plays a historical role in the humanitarian crises. Quite often relief organizations arrive on the scene well before the US military becomes involved, respond during the relief operations, and remaining long after the military leaves. (ICHMO, 1994,no-page).

Accordingly, the US military must arrive and function as a support organization rather than attempting to organize and execute as the lead agency for the short-term engagement. The military's involvement should be used to leverage the participating relief organizations (Lange, 1998:9). According to the Joint Staff J-4 for international Logistics Division, far too often the US military

acts as the 800-lb. gorilla creating short and long-term problems for the international humanitarian community. It is often difficult for the US military to follow the lead of the humanitarian community for operations, but this supportive role is one we [the military] must strive to achieve” (Tedesco, 2000:Interview). This premise serves as a major building block in which to address the research questions.

This research does not address the political and strategic decision making process of why US military engages in HA/DR or the political or military objectives as tasked to the JTF-AR. However, in discussing the unique KSAs developed to support operations, the successful integration of airlift assets at the tactical levels directly influences the overall strategic objectives as established by senior military advisors, political leaders in Washington D.C., and US Embassy in the host nation. Both the Director of Mobility Forces (DIRMOBFOR) and the Expeditionary Operations Group (EOG) Commander for JTF-AR described the existence of excess intratheater airlift in country. In their separate after action reports (AAR), they both identified that JTF-AR could have reached its tasked objectives with fewer assets deployed to theater, but strategic direction guided the level, composition, and number of assets deployed (Gilbert AAR, 2000:n-page; Cassidy, 2001:interview). The previous paragraph established that while this research focuses on training those USAF mobility experts who operate at the tactical levels during HA/DR, a direct correlation can be drawn that if some of these same forces who work in the operational planning process receive training in HA/DR, they could influence the level and capability of USAF mobility forces

deployed in an operation. As a result, the overall HA/DR operation could see more efficient and effective integration of USAF capabilities—saving money, time, and manpower.

One final assumption about the role USAF mobility experts play in the US military's response to HA/DR must be presented. The JTF commander will find the greatest benefit from having trained USAF mobility experts on his staff or in the humanitarian coordination centers comes when *intratheater* airlift participates heavily in the HA/DR operation. While the skills and dedication of USAF mobility experts will always contribute to the JTF, it is the inclusion of intratheater assets that necessitates highly skilled mobility experts with the humanitarian relief KSAs. This assumption has been substantiated through interviews and numerous case studies and will be expanded on in subsequent chapters. If intratheater airlift is not involved, then current USAF doctrine defined in, Air Force Doctrine Document 2-6 Air Mobility Doctrine (AFDD 2-6) adequately addresses the structure, roles, and responsibilities performed as well as the KSA the USAF mobility experts must possess during HA/DR operations (AFDD-2; 2000:25-29).

1.3 Defining HA/DR for the USAF

Understanding the idea of military operational integration into HA/DR depends upon understanding the scope of military actions in this environment. Since the end of the cold war the term military operations other than war (MOOTW) has been the catchall phrase for any action the US military has engaged in short of full-scale war (JP 3-07, 1995:I-1). Joint publications provide much of the guidance for defining operations along the continuum as is illustrated

in Joint Pub 3-07, Doctrine for Military Operations Other Than War (Figure 1-1).

RANGE OF MILITARY OPERATIONS			
Military Operations		General US Goal	Examples
COMBAT	War	Fight & Win	Large-scale Combat Operations: Attack / Defend / Blockades
	NONCOMBAT	Deter War & Resolve Conflict	Peace Enforcement / NEO Strikes / Raids / Show of Force Counterterrorism / Peacekeeping Counterinsurgency
		Promote Peace	Antiterrorism / Disaster Relief Peacebuilding Nation Assistance Civil Support / Counterdrug NEO

Figure 1-0-1: Range of Military Operations,

JP 3-0, 1995:1-3

The objective of MOOTW usually does not include overwhelming a foreign military opponent; rather, one of the primary goals of MOOTW is to minimize violence and encourage peace and stability (AFDD 2-3, 2000:2). A subset of MOOTW which focuses more on operations which involve humanitarian military response is that termed 'complex contingency'. Although the range of possible military tasks in complex contingencies is vast, they usually fall into five general categories of activities: (1) providing humanitarian assistance; (2) protecting humanitarian assistance; (3) assisting refugees and displaced persons; (4) enforcing a peace agreement; and (5) restoring order (Byman et al., 2000:27). Examples of complex contingencies executed in the last decade include

operations such as the peace accord implementation conducted by North Atlantic Treaty Organization (NATO) in Bosnia (1995-Present), the humanitarian intervention in Northern Iraq called Operation PROVIDE COMFORT (1991), and the foreign humanitarian assistance operations such as Operation SUPPORT HOPE in Central Africa (1994) (PDD-56, 1997: 3). These same operations have been termed “complex emergencies” by the humanitarian community and are used to define the higher risk humanitarian environment in which IO/NGOs operate (McGoldrick, 2001: Interview).

Unlike US Army or Marine Corps in complex contingencies, the USAF mobility forces have little variance in how they employ. The difference largely stems from whom they employ with and whom they support. In the area of deterring war and resolving conflict (Figure 1-1) the USAF operates in a high threat environment and focuses on operational support of US military forces. In the arena of promoting peace (Figure 1-1), USAF forces operate for and with civil organizations to a much higher degree. The significance of this point is that it is within this second or lesser threat area of the spectrum of MOOTW or complex contingencies that the USAF so readily operates. Joint Pub 3-7 describes this as military operations other than war not involving the use of threat or force (JP 3-7, 95:I-3). Within this area, the most widely supported by the USAF is humanitarian assistance and disaster response. Humanitarian assistance and disaster response operations encompass a wide array of USAF missions that include utilization of conventional combat forces for force protection, special operations, and strategic and tactical airlift operations. The spectrum of response ranges

from supporting complex contingencies, which was the case in Somalia, to leading a purely natural disaster response—the case of Mozambique. It is to the latter and more benign area within the discussion of doctrine that this research paper pertains. For the purpose of this research, the definition of humanitarian assistance/disaster response provided by AFDD-2 will be used:

Humanitarian Assistance/Disaster Relief (HA/DR) Operations: These operations are conducted to alleviate natural or man-made disaster or other endemic conditions such as human suffering, threat to life or results in great damage. These operations may supplement or complement the logistics efforts of civil authorities who may have the primary responsibility for providing humanitarian assistance and frequently take the form of transport, supply, and distribution (AFDD 2, 2000:13-14).

1.4 Research Approach

This research provides a set of insights gleaned from published and unpublished literature, military case studies of HA/DR operations, and interviews and surveys with individuals involved in a wide range of operations associated with HA/DR efforts. The research collection falls within two categories: primary and secondary.

Primary Data: Primary data was obtained through interviews and a survey targeted at military and civilian personnel who have had experience in the field of participation within HA/DR operations. Every attempt was made to focus on the breadth of the community during the interviews and survey. In addition to a cross section of military and civilian professionals, specific emphasis was placed on discussions with Third Air Force (3 AF), Royal Air Force, (RAF) Mildenhall, and those members of the staff who deployed to JTF-AR. One of the key success

stories for JTF-AR was the validation of the concept of integrating a military operation into a civilian-led relief effort (Sligh, 2001:n-page). Given this fact, 3AF's command structure and staff training provided the foundation upon which the author built his research.

Secondary Data: Books, journals, official papers, and published military research have provided an abundant source of useful secondary sources. Military doctrine published in a number of joint publication documents provide the foundation for US military HA/DR operations. In addition to military doctrine, research published in the Defense Technical Information Center (DTIC) documents provided a wealth of knowledge on previous research in the area of HA/DR as well as insight into the many operations in which the US military has participated. To gain insight into the civilian perspective of HA/DR, the author consulted publications by civil professionals and civilian institutes. A more in-depth analysis of the materials used for research is described in chapter two.

1.5 Research Objective and Outline

Through an investigative study of the research questions addressed above, the author hopes to achieve the following objectives:

1. Provide the joint community an understanding of the contributions USAF mobility experts make to HA/DR operations.
2. Persuade the USAF to provide its mobility experts with the needed KSAs to effective and efficient integrate USAF airlift assets into HA/DR operations.

To achieve these objectives the paper will follow this format. Chapter one has scoped the research and outlined the research questions to be addressed in an effort to achieve the paper's overall objective. Chapter two covers secondary information—research background and a literature review, while chapter three covers the primary data of interviews and the exploratory survey. These two chapters provide the foundation for which the research questions can be addressed in subsequent chapters. Chapter four is a case study of JTF-AR, and specifically addresses the role USAF mobility experts played in the operation.

Chapter five reviews the US military's and USAF's role in HA/DR and addresses the growing role USAF mobility experts are taking in HA/DR operations. This chapter continues by examining the HA/DR environment in which the mobility experts operate and addresses how unique KSAs specific to the HA/DR impact operational success. Chapter six examines why these KSAs are unique and separate from those developed for war, and it then presents which KSAs that the USAF mobility experts should develop. Currently, USAF personnel receive limited exposure to the KSAs necessary to work in the international disaster environment. What limited training provided is done through studies at the military service schools. While this exposure is enlightening and provides some framework for the KSA associated with the HA/DR environment, a deeper understanding of the international community and the USAF role must be addressed for those individuals who will take a more active role in operational deployment.

The final chapter summarizes the gains delivered to the JTF commander from the recommended training, addresses where this training can be gained and makes recommendations on potential organizations that should pursue gaining KSAs for deployed operations.

Chapter 2.0 Literature Review

The objective of this literature review is two -fold: first, to set in place that HA/DR is firmly in bedded within the range of current military tasks and will continue to be so well into the future, and second to introduce the notion the HA/DR environment is unique enough to warrant specific study of its culture and thus specialized training for mobility experts engaged in its operations. To accurately develop an understanding of the HA/DR environment and the subsequent roles and the responsibilities of USAF mobility experts in this environment, this chapter begins with a review of secondary data available in this field. No shortage of material exists. Since 1990, the number of studies and articles on the subject of military participation in HA/DR relief has seen exponential growth (Weiss, 1997:97). This growth has transpired in two areas. The first, primary literature, is published literature both within and outside the military community. In addition to published literature, sources in the form of messages, unofficial correspondence, and lessons learned from previous HA/DR operations will be examined. The applicability of these secondary literature sources will be more closely examined in the ensuing chapters.

2.1 Published Literature

The basis for which the military prepares for HA/DR is published in joint military doctrine. In 1990 little joint doctrine existed on interaction with outside agencies. The impact of non-military agencies is far more pronounced in military operations other than war where decisive military engagement is not planned for or expected to play a role in operations. Given the revolution in HA/DR and the

military's response to these crises, the US military has attempted to close the void existing for its forces with doctrine on the implementation of civil military operations (CMO) within the JTF structure. Table 2.1 provides a listing of current and draft joint publication (JP) beginning with MOOTW and building through the employment of CMO and its influence on the HA/DR environment for the military.

Publication	Title	Date
Joint Pub 3-0	Doctrine for Joint Operations	1 Feb 95
Joint Pub 3-07	Joint Doctrine for Military Operations other Than War	16 Jun 95
Joint Pub 3-07.3	Joint Tactics, Techniques and Procedures (JTTP) for Peacekeeping Operations	12 Feb 99
Joint Pub 3-7.6	JTTP for Humanitarian Assistance	Draft
Joint Pub 3-08	Interagency Coordination for Humanitarian Assistance Vol. I, II	9 October 1996
Joint Pub 3-57	Joint Doctrine for Civil-Military Operations	8 Feb 2001

Table 2-0-1 Joint Publications Referencing HA/DR

Joint Publication 3-0 introduces the levels of interagency integration at the strategic level within the full spectrum of military engagements. The JP states that JTFs are likely to operate with other agencies representing other US instruments of nation power, with foreign governments, and with nongovernmental and international organizations. It goes on to address that management quite often is the modus operandi versus command and that the US military may perform a support role to anyone of these agencies, and in the absence of civilian leadership, the military may have to build consensus between the multiple agencies to achieve unity of effort (JP 3-0, 95:I-7). Joint Publication 3-07 expands on JP 3-0 in the area of MOOTW focusing primarily on operations

within the spectrum of deterring war and resolving conflict with very limited discussion on HA/DR. It only addresses humanitarian assistance operations in respect to actions directed by the National Command Authority (NCA). The US military will engage in HA operations unilaterally, in concert with foreign governments, led by one of the UN agencies, or by the host nation (JP 3-07, 99:III-5; Byman et al., 2000:114). Given the operation may require a higher level of coordination with the IO/NGO community the critical link Civil Affairs (CA) personnel play in achieving the JTF's objectives is addressed.

Joint Publication 3-08, Vol. I and II provide greater insight into the interagency process beginning at the strategic level and working down to the operational level. It provides guidance for how a JTF should conduct coordination with the US Embassy team, US GOs, IOs, and NGOs during HA/DR operations. This publication does much to emphasize the coordination centers in which the multiple agencies meet. The most important of these, the Civil-Military Operations Center (CMOC), is extensively addressed in this joint publication. Specifically, Joint Pub 3-08, Vol. I recommends a CMOC composition, lists specific tasks, and addresses the military relationship to NGOs. The composition the JP recommends includes "organic operations, intelligence, civil affairs, logistics, communications elements, liaison from services and functional components, and supporting infrastructure such as ports and airfields." (JP 3-08, 1996:III-17/18). It further describes a dozen tasks CMOCs may be expected to perform. Many of these tasks surround the coordination of military logistics support to include airlift as well as assistance in coordination of airspace and

airfield operations (JP 3-08,1996:III-18/19). The JP also explains the necessity of educating IO/NGOs on what they can realistically expect from the military (JP 3-08,1996:III-26). When intratheater airlift is engaged in the relief operation, the USAF mobility member has an active role in explaining the limitations and capabilities of the airlift support. While Joint Pub 3-08, Vol. I, does describe the function of the CMOC, it does not clearly describe the best means to organize it to foster significant collaborative efforts (Hinson, 1998:21). Volume II provides the overview, authority and responsibilities, organizational structure, core competencies, and interagency relations of U.S government agencies, and the largest IO and NGOs to which the military will coordinate with during a MOOTW. Appendix J, "Humanitarian Assistance during Complex Emergency, The Mohonk Criteria" provides the commanders insight regarding the humanitarian assistance philosophy of many of the international relief agencies (JP 3-08 Vol II, 1996:J-1).

Joint task force operations are increasingly required to take account of social, political, cultural, economic, environmental, and humanitarian factors when planning and conducting military operations (CMO, 2000:n-page). The doctrine of CMO may hold the key for military commanders to establish and foster relationships with the civilian community. As defined by Joint Publication 3-57, Joint Doctrine for Civil-Military Operations, the decisive and timely application of military capabilities to enhance the relationship between the military and civilian populace is important in order to ensure accomplishment of the commander's mission (JP 3-57, 2001:IV- 1). CMO has become a central theme of any HA/DR operation. Within this environment, the aim of CMO is to

establish and maintain full coordination with the IO/NGO community in order to create conditions, which offer the military commander the greatest possible morale, material, and tactical advantages. In order to achieve these aims, CMO requires an organization containing three elements; a staff to plan and advise the commander, civil affairs functional area specialists, and additional resources drawn from the force for specific CMO tasks (CMO, 2000:n-page). It is the category of additional resources in which the USAF is instrumental to CMO.

Joint Pubs 3-08, and 3-57 provide excellent descriptions of the CMO environment in which the military has become accustomed to operating. Although joint doctrine provides a great deal of general guidance on planning processes and substantial guidance on planning factors for HA/DR, the complex procedures for translating civilian humanitarian needs to military capabilities remains an understudied and little understood topic (IDA, 2001:III-25)

Some of this shortcoming has been addressed in USA Field Manual 100-23-1, Multiservice Procedures for Humanitarian Assistance Operations, 31 October 1994. This manual has applicability to any service tasked to organize, deploy and execute a humanitarian JTF. It provides an excellent road map to dealing with the HA/DR environment by covering operations from the strategic to the tactical level (FM 100-23-1:no-page). As a result it is applicable to all levels of service members involved in HA/DR operations. While the manual is a key publication to deploy with, its strength lies in the training aspect service members should receive prior to involvement in an operation.

In addition to joint publications, the USAF has published Air Force Doctrine Document 2-3, Military Operations Other Than War, 3 July 2000. This publication represents the first endeavor for the USAF to define its role and responsibilities in the full spectrum of MOOTW. The doctrine addresses how best to use aerospace power in MOOTW as well as stressing the lessons learned from previous operations in an effort to enhance the combat capability of USAF forces. (AFDD 2-3, 2000:1). AFDD 2-3 identifies the critical support mobility experts provide the JTF during MOOTW—acknowledging that they could be the primary contributor to success (AFDD 2-3, 2000:12). The doctrine covers many important KSAs the USAF personnel must understand to support the HA/DR JTF commander. However, the doctrine falls short of addressing the role of mobility experts in non-traditional positions—for example as members of the CMOC, the J-3 staff, or as the lead US military agency for the HA/DR.

While doctrine has provided formal guidance and direction to our military forces, the explosive growth of the number of documents and articles published within military journals and DTIC documents provide additional tools for those learning about the HA/DR environment. Through the studies, the author was able to categorize the publications and articles into three broad areas. The first area is those documents that address the humanitarian environment and the cultural divide between the military and humanitarian agencies. The second area addresses case studies of US military operations in many of the better-known military interventions. Finally, the remainder of the studies focus on U.S military interaction between and within the humanitarian coordination centers.

Going into to any significant detail on research pertaining to the cultural divide between the military and the IO/NGO community far exceeds the scope of this paper. Rather than reiterate published literature, chapter six will highlight the significant differences of the two communities and will thus provide support for the contention that understanding the differences between the communities is vital for USAF mobility experts.

The case studies examined provide insight into how the US military engaged in HA/DR as well as how the divergence of the military and civilian cultures helped or hindered operations. Other than the case of JTF-AR, these case studies have limited discussion on the role USAF mobility experts play in the operations. However, lessons applicable to the USAF mobility experts can be gleaned which support the notion that the HA/DR is unique enough to require KSAs specially developed for the HA/DR environment. The case study of JTF-AR provides the greatest amount of information on the USAF engagement in HA/DR and therefore plays an integral role in the discussion in the context of this research.

Finally, many of these DTIC publications and articles transcribed CMO doctrine from the pages of doctrinal manuals to actual application while others influenced how our military doctrine was written. One such example is Major Chris Seiple's book, Square-Dancing into the Future: the U.S. Military/NGO Relationship and the CMOC in Times of Humanitarian Intervention. Seiple's book is the single best case study of the coordination process at the tactical level. He pays special attention to the significant impact the CMOC makes on the success

or failure of the overall operational coordination process. While all these publications brought to light HA/DR issues and operations, they failed to address USAF mobility experts other than in an airlift support role.

As was introduced in chapter one, the USAF has been engaged in supporting HA/DR operations since its inception as the Army Air Corp. The book, Humanitarian Airlift Operations 1947-1994, authored by Daniel L Haulman, traces the roots of USAF, HA/DR operation providing the reader a brief description of operations ranging from delivery of a single pallet of medical supplies to ongoing operations with in the Baltic region.

In 1992, under the reorganization plan for the USAF, some of these assets were permanently assigned to the European and Pacific theaters and therefore their missions did not make it to the history logs of HA/DR operations. For a synopsis of operations since 1992, US Transportation Command (TRANSCOM) provide raw data of some of Air Mobility Command's HA/DR missions. The author's experience flying C-130s within the Pacific and European Theaters in the last eight years helped in the development of an average yearly count of HA/DR operations undertaken by the USAF airlift community. Daniel Haulman's book and the data collected from USTRANSCOM underestimated the extensive amount USAF mobility airlift has participated in HA/DR worldwide. Suffice it to say a conservative estimate would put it over 20 operations a year, as reported by Haulman (Haulman, 1996:5)

In 1999 General John Jumper, former Commander of US Air Forces Europe commissioned a study as part of the Strategic and Doctrine Programs of

RAND's Project Air Force. The study entitled, Strengthening the Partnership: Improving Military Coordination with Relief Agencies and Allies in Humanitarian Operations, made numerous recommendations for implementation by the USAF to enhance its response to HA/DR. Of these, recommendations pertinent to the idea of training includes improving military familiarization with key relief organizations, establishing more 'centers of excellence' for humanitarian research and training, and bringing relief organizations into the planning process for airlift operations (Byman et al., 2000:169). This study will help formulate the development of the KSAs for USAF mobility experts, which should be utilized during future HA/DR.

An additional article written by Major General Nich Letoluo Leshan, Commander, Kenya Air Force, provides some insight on the utility from a third world nation's perspective of the role of airpower in humanitarian operations. While short, Maj Gen Leshan's article The Role of Air Power in Humanitarian Operation succinctly points out why mobility experts should prepare and train for HA/DR operations. According to Maj Gen Leshan, it's only those personnel skilled with air mobility background that can effectively integrate airlift in support of humanitarian or disaster relief (Leshan, 1998:5)

Military publications only constitute a small piece of the literature published on HA/DR operations. Other publications go far more in depth on the human suffering and courses of actions that the civilian community confronts. One of the greatest differences in focus between the military and civilian community is the relationship of time to any operation. For the civilian

community, humanitarian operations span not only months, but often years. In the case of relief operations to the Sudan, the UN and a number of NGOs have provided food and supplies for over three decades (McGoldrick, 2001:Interview). While publications within the civilian community address many of the same areas as the military, they spend more time addressing training for members who participate at all levels in HA/DR crises. This training primarily focuses on relieving suffering and nation building over the long-term. They also address how the humanitarian agencies interrelate with the indigenous populations.

The literature linking the military and civil communities together is not limited to that written by the military—more and more the civilian communities have addressed the military in relation to their own operations. Andrew Natsios, recently named head of the US Agency for International Development (USAID) published a book entitled, U.S. Foreign Policy and the Four Horseman of the Apocalypse. In his book he pointedly addresses the strategic issues influencing the US decision to engage in HA/DR crises to include the strengths and weaknesses of the military as an implementation tool for HA/DR crisis.

While Andrew Natsios addresses the strategic concerns of HA/DR, Frederick C. Cuny in his book, Famine Conflict and Response: A Basic Guide, brought this thinking to the tactical¹. For Mr. Cuny politics, military, strategy, economic principles and humanitarian relief were not unrelated sectors divorced from each other, but interconnected. He believed that most humanitarian and military personnel arrived in a country with little, if any, good information on the situation, culture or what factors lay at the heart of relieving the suffering of those

in need (Cuny, 1999:ix). While Mr. Cuny's book provides an explanation to some of these issues, the issue most applicable to the military planner from the tactical perspective addresses logistics, assessment, and monitoring of HA/DR crises.

Mr. Cuny believed there are few experienced or trained logisticians working in emergency operations. As a result, this vital activity is plagued with problems and costly delays (Cuny, 1999:95). Gen Leshan emphasized this point. While logistics play in the movement of goods in any environment, the objective is different in humanitarian crises. Market forces, i.e. cost, traditionally drive the manner to which goods are moved. However, in the HA/DR case, time becomes the element by which movement of goods is measured. In this sense, the time element is unique to HA/DR logistics and makes it distinct from other forms of logistics operations (Cuny, 1999:97). USAF mobility experts bring to the field this logistics expertise since in combat time, not money, is how we rate the success of our logistical network. The value of Mr. Cuny's book to the military does not lie in teaching the military how to perform its logistic operations; rather it explains to the military how the humanitarian community applies its logistics operations. If the military has a greater understanding of the environment in which they must integrate, then the humanitarian response is one step closer to achieving unity of effort.

Another excellent resource in this research field is a recently published book by the U.S Institute of Peace, established in 1984, entitled Guide to IOs, NGOs, and the Military, in Peace and Relief Operations. This book was written to help the field staff of IOs, NGOs, and peacekeeping forces as well as military

personnel develop a basic understanding of the outlook and operations of these major third party institutions. It is an effort to build mutual understanding and respect and to facilitate cooperation and coordination within a HA/DR operation (Aall et al., 2000;XIII). The introduction proposes that there is no standard crisis, therefore, no standard response between the agencies can be established. However, the authors postulate that enough similarity exists in each crisis that basic lines of coordination can be drawn between all organizations involved in HA/DR operations (Aall et al., 2000;XII).

The guide is divided into three chapters—the IGO, NGO, and the military with each chapter being written by an expert in that particular field. The authors do not attempt to compare and contrast the communities but provide the characteristics of each. This allows the reader to gain a better understanding of the organizations without developing a bias between them. For the authors the cooperation and coordination of the military and the international community is inevitable and only through understanding the differences and the similarities between the two can the world community better operate in a growing complicated environment. This guide, as with others within the civilian community, serves as a building block to understanding the key agencies engaged in HA/DR operations.

The shortcoming of this primary literature review is the lack of material directly pertaining to USAF mobility experts. This shortcoming is addressed to a great or lesser degree by examination of secondary, or unpublished, literature in the following section.

2.2 Unpublished Literature

After action reports (AAR), situation reports (SITREPS), and memoranda help bring to light the role of mobility experts in HA/DR operations. Before the Operations SHINING HOPE and ATLAS RESPONSE, literature had been limited to those AARs from the DIRMOBFOR. While these reports highlighted the role both strategic and theater airlift played in the HA/DR operations, they fall short of addressing the role the mobility experts play beyond traditional movement of relief supplies through the air. Third Air Force's role in Operations SHINING HOPE and ATLAS RESPONSE provided the greatest influx of unpublished literature. The individual documents are too lengthy to address in this chapter, but they will be referenced throughout the remainder of this research paper.

The Joint Universal Lessons' Learned System (JULLS) covered by Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3150.25 requires commanders to submit all significant lessons learned before, during, and after an operation as well as any significant issues encountered during an operation or exercise (CJCSI, 1997:1). Within this database, lessons learned from the US military response to Hurricane Mitch and JTF ALTAS RESPONSE were examined. JULLS derived from these operations highlighted some of the shortcomings of the US military's ability to operate in the HA/DR environment. More applicable to this research is how resources, mainly USAF assets, were misallocated in each of these operations. These lessons learned coupled with the research and interviews provide support the proposition that the military and

the USAF are not adequately prepared to support the JTF commander in response to HA/DR operations.

Finally, an abundance of information exists on the World Wide Web. Relief Web, a product of the United Nations covers a plethora of information on the many IO/NGOs that exist as well as the training available for the civilian and military community. InterAction, a US-based umbrella organization for over 165 US-based not-for-profit organizations also forms standing committees and task forces to conduct projects on matters of mutual concern to its members (Byman et al., 2000:90).

2.3 Conclusion

The literature pertaining to the humanitarian environment provides the background upon which this research is built. Along with this secondary data, the case study of JTF-AR, interviews, and exploratory survey provide the foundation for the justification of development of KSAs the USAF mobility experts should develop for its future HA/DR operations. The remaining chapters build on this research to provide a case for this training and what the KSAs should be.

Chapter 3.0 Methodology

As Chapter one indicated, the primary data for this paper encompasses a cross-section of interviews and a survey sent to those individuals who are experts in the field of HA/DR. While much is written on the HA/DR from both sides of the military and civilian divide, very little pertains to which KSAs should be developed for the successful integration of military operations into the humanitarian environment. Even less can be gained from literature on the role USAF mobility experts play in HA/DR beyond the logistical support of delivering forces and humanitarian relief supplies. The interviews and survey did much to support the author's view that very few members in the USAF are trained in CMO and that—given the revolution in HA/DR—the US military would gain tremendous benefits by training USAF mobility experts for these operations.

3.1 Interviews

The interviews focused on gaining a better understanding of the humanitarian environment, USAF mobility force integration into this environment, and what training the USAF should focus on to develop distinct KSAs for its mobility experts to operate in an HA/DR environment

The interviews conducted crossed both the military and civilian lines. Current and former members of US Special Operations Command (SOCOM) and US Army, who specialize in CA, provided tremendous insight to the CMO environment at the tactical levels. While supporting the notion that the USAF should not develop a CA career field, they did agree, however, that trained mobility experts involved within the CMO arena could be a force multiplier to the

JTF commander. Trained USAF mobility experts could significantly further the accomplishment of the JTF mission objectives in a more timely and effective manner. Former Secretary of State, Madeline Albright, “By melding the capabilities of the military and the NGOs and PVOs you have developed a force multiplier” (Joint Pub 3-08, 1996:II-18). In addition to interviews with SOCOM personnel, members within the Joint Staff—notably the J-4, International Logistics Division, and J-5 Political-Military Plans Division—were interviewed. They provided great insight into the concerns and goals the Joint Staff has in engaging in HA/DR and what actions from the operational and tactical levels would facilitate the US military achieving the goals outlined by the NCA. Both divisions supported the premise that—given the right circumstances—trained USAF mobility experts integrated into key positions of the military operation would contribute to the operation’s unity of effort.

Members throughout the USAF were interviewed to gain an understanding of the role USAF mobility experts currently and could potentially play during HA/DR. Due to the limited engagement of USAF military forces outside the traditional roles of the Air Mobility Division (AMD), the interviews were conducted primarily with those personnel who were involved in Operations SHINING HOPE in Albania and Operation ATLAS RESPONSE in Mozambique. Third Air Force, provided the greatest insight into this research area as the lead for the US military response in both operations. Interviews were conducted with the Humanitarian Assistance Survey Team (HAST) chief, the deputy CMOC director, the DIRMOBFOR, and the JTF commander. Interviews were also conducted

with members of the 37th Airlift Squadron (37 AS) and the 86th Contingency Response Group (86 CRG), Ramstein AB, Germany who were deployed to the Operations ATLAS RESPONSE at all levels of operations. These members worked directly with the IO/NGO community to upload and download aircraft and optimize the airlift available to meet the IO/NGO needs. Chapter Four, a case study of JTF-AR, will discuss this operation and introduces the premise that training USAF mobility experts for HA/DR operations can and does yield extremely successful results.

Finally, the author conducted interviews with the DIRMOBFOR for JTF-AGUILA, the US military support for Latin American victims of Hurricane Mitch, the USAF JTF commander for JTF-AVID RESPONSE, which was the US military assistance to Turkish victims of devastating earthquakes in 2000; and the Department of Defense Humanitarian Liaison Officer, U.S Mission, Geneva. These interviews enhanced the support for the expanded role the USAF is playing in the coordination of U.S military and USAF operations in the international community's response to humanitarian crises

In an effort to gain the civilian perspective of the US military and USAF roles and responsibilities the author solicited interviews with members of the IO/NGO community. Interviews were conducted with members of the UN Office for the Coordination of Humanitarian Affairs (OCHA) and the former Office of Foreign Disaster Assistance (OFDA) Director and current member of the Institute for Defense Analysis (IDA). Current and former members in the Department of State (DoS)--Bureau of Population, Refugee, and Migration (PRM), and the

Bureau of Political-Military Affairs—and members of the OFDA, provided insight from the strategic to the tactical level of key factors affecting the success of any US military engagement in the HA/DR arena. Members of US Pacific Command's Center of Excellence (COE), a congressionally established research and education center focused on preparing the US military for interaction with the civilian community during HA/DR operations, provided support for the premise that training to operate with the IO/NGO community is a necessity. The center currently employs former members of the US military and civilian community experienced in HA/DR operations. They conduct training courses, exercises, and on-site support for USPACOM as the command expands its roles in participation for greater HA/DR operations.

One final note about the author's personal perspective on this research. As mentioned in chapter 2, the author flew C-130s in both the European and Pacific theaters. In so doing, I have become extremely familiar with HA/DR operations and the trial and tribulations of supporting these operations through the use of intratheater airlift. While I did not participate in the Mozambique deployment, I became particularly familiar with the operation through supporting the EOG from home station and through discussions with senior wing leadership and aircrew who conducted operations.

3.2 Exploratory Survey

In addition to interviews, an exploratory survey was sent to members in both the military and civilian community. This was the author's first foray into the complex world of questionnaire design and analysis and considerable thought

was applied to the manner the questions were developed. The survey was sent to these experts to help scope further interviews and research on what experts felt was the proper role of the USAF and the KSAs needed by the mobility experts in HA/DR operations. The data was consolidated and followed up by telephone interviews. The exploratory survey results were also used as the basis for the author's additional interviews. Every effort was made not to send the survey to those who were previously interviewed; however, over the course of study and the resultant change of the author's focus from the USAF role in the CMOC to a broader focus of USAF mobility experts operating in the HA/DR environment, the author felt that providing these same individuals with the survey did not cause the study to become invalid. The surveys are contained in attachment A.

The survey was broken into three parts. The first section, personal information, provides background on the individual's experience in HA/DR operations. The second section was intended to capture the individual's experience in working with the US military and the USAF in training, exercises, or field operations. This section also asked questions about the utility of USAF mobility experts in HA/DR operations. The responses to these questions furthered the research discussed in chapter five. The third section focused on the breadth of training—namely what KSAs are necessary for engagement in HA/DR operations and how the USAF mobility experts should seek to gain these KSAs to more effectively conduct in future HA/DR operations.

One disadvantage of the survey consisted of the timing in which the survey was forwarded to the participants. Given the condensed research period and the change of focus of the research itself, the survey was forwarded to the participants late in the research period. While almost all those who received a survey, returned completed responses, follow-up research and interviews were limited. The results may lack some level of validity from a strict academic sense. Secondly, the questionnaire was done as a qualitative analysis which restricted the ability to perform any statistical calculations or quantitative inferences. These difficulties aside, the responses from the participants significantly supported the focus of the author's research

3.3 Conclusion

The literature review pertaining to the HA/DR environment provides the basis upon which this research is built. The interviews, exploratory survey, and the case study of JTF-AR, which will be examined in the following chapter, will help to validate the premise that providing unique KSAs for USAF mobility experts through training should be developed for future HA/DR operations. The remaining chapters build on this research in and effort to provide a case for directed training.

4.0 Case Study of Mozambique

Between October 1999 and May 2000, two cyclones, heavy rainfall, and the ensuing floods devastated the Southern African nation of Mozambique. Even as the Government of Mozambique (GOM) and the international humanitarian community executed emergency response plans, the GOM recognized that the severity of the conditions out-stripped the capabilities of the participants. In response the GOM requested immediate assistance from the United States and other nations throughout the world. The US acted upon this request by deploying the Disaster Assistance Response Team (DART) from the Office of Foreign Disaster Assistance (OFDA) and US military as well as airlift assets to participate in search and rescue and relief operations. The USAF, as lead agency for the US military response, played an important role in stimulating, mobilizing, and coordinating the assistance that was provided to Mozambique throughout the peak month of flooding (OCHA, 2000:18). This chapter will provide a review of the humanitarian crisis caused by the floods in Mozambique, examine the USAF's role in providing humanitarian assistance through JTF-AR, and address the lessons learned from the USAF as the lead military responder in JTF-AR.²

4.1 The Flooding of Mozambique...A Brief History

Since its independence in 1975, Mozambique and its partners in the international community have acquired substantial experience in dealing with humanitarian crises. Damage caused by annual cyclones, excessive rainfall, and the accompanying flooding compounded civil unrest from warring factions within

the borders (OCHA, 2000:3). As reported by the UN 1999 Human Development Report, Mozambique sits as one of the poorest countries in the world. Its human development index, .340, ranks it 169 out of 174 countries despite its steady economic growth since 1984. Since 1996, Mozambique's gross domestic product increased dramatically—ranging from 7 to 12 percent annually. Multiparty elections in 1994 and 1999 won high praise from international observers (OCHA, 2000:2). As a result the country seemed well on its way to recovery and development when unprecedented flooding overwhelmed the country's capabilities to relieve suffering and to save lives.

This region of Southern Africa experiences a rainy season from October through March when handling cyclones and floods become a normal occurrence. Mozambique's 2500-km coastline is equivalent to the US coastline running from Maine to Georgia. Mozambique possesses over 100 rivers, 9 of which originate in Mozambique's neighboring highlands and take their run-off through the lowlands to the Mozambique Channel. Most of the central and southern region is river basin. At times Mozambique can be plagued with simultaneous flooding and drought (OCHA, 2000:2). Following the long civil war the GOM put in place a strong management system to control the country's vulnerability to natural disasters. The creation of a new oversight institute, the Institute of Disaster Management (referred to by its Portuguese initials as the INGC) and the development of a national disaster mitigation policy, contributed to the substantial success of dealing with the heavy rains and flooding so common in the rainy season (OCHA, 2000:2).



Figure 4-1: Map of Mozambique

Sligh, 2000:CD-ROM

Unfortunately these plans were unable to deal with the devastation that struck Mozambique in the fall of 2000. Heavy rains began to fall in the region in the spring of 1999. Between October and December, rainfall in Mozambique was 70 percent above normal in Maputo and 25 percent above normal in the city of Xai Xai, in Gaza province north of Maputo (OCHA, 2000:5). During the last

weeks of January, the rains continued to be unusually heavy in southern Mozambique—causing alarm to the government. Within this same period, cyclone Connie struck the south and central region of Mozambique. Moving slowly through Mozambique and into Swaziland, South Africa, Southern Zimbabwe and Botswana, cyclone Connie dropped record rainfall—greater than 20 inches in some places. By 12 February, Mozambique experienced serious flooding affecting over 300,000 Mozambicans, of which 100,000 persons were displaced (OCHA, 2000:6).

The international community responded admirably by performing rescues and assistance to displaced persons. A number of military and contract fixed wing aircraft and helicopters performed missions from the capital, Maputo. On 17 February, EUCOM dispatched a HAST headed by USAF Lt Col Steven Dreyer from 3 AF, RAF Mildenhall, United Kingdom (U.K.) and staffed by personnel from EUCOM, US Air Forces Europe (USAFE), and US Army Europe (USAEUR). As the eyes and ears of the CINC, the HAST's mission was to apply good judgement and pass recommendations to the CINC. This was to be done by observing and making friends with the IO/NGO community and the host nation (Dreyer, 2001:Interview). The team arrived on 18 February and went to work to determine what, if any, assistance the US military could provide. By 22 February, the road from Maputo to South Africa—closed immediately following cyclone Connie—was re-opened, lines of communications began to open, and the flooding—stabilized resulting in waning donor interest (OCHA, 2000:6). The US HAST asserted the situation was under control and required no US military

involvement. However, EUCOM, after consultation with 3 AF, recommended the team stay in Maputo to monitor the after effects of cyclone Eline, which was forecast to reach Mozambique within the following days (Wehrle, 2000:Interview).

On 23 February cyclone Eline made landfall—causing heavy rainfall in central Mozambique, Zimbabwe, and northern South Africa. The rain falling on saturated ground ran off quickly—accentuating the regional flooding. On 27 February, search and rescue flights again resumed for those stranded and missing. By 1 March, floodwaters in some regions exceeded previous record highs by as much as 3 feet. By 6 March, South African and Malawi helicopters had rescued an additional 13,600 people while Mozambique military and Red Cross fishing boats rescued another 15,000. Reports indicated that some Mozambicans spent as many as 10 days on rooftops and in trees awaiting rescue (OCHA, 2000:6). Two near simultaneous cyclones, heavy rains, and the ensuing flooding nearly ravaged the nation causing nearly 550,000 internally displaced persons (IDPs) in more than 100 different and often inaccessible locations. According to a UN report, “The need for food, shelter, water, improved sanitation, and health care was massive; however, virtually all roads and railroad lines in the affected areas were closed with bridges down or roads washed out or still flooded” (OCHA, 2000:6).

Again, relief support poured into the nation. Besides international donors, eleven military air forces provided aircraft in addition to those hired privately. At the peak there were 56 military aircraft in operation with more than 1000 military personnel associated with the operation (OCHA, 2000:12). Airlift of food and

medicine and the intermittent rescue of stranded Mozambicans continued throughout March. By mid-March, 300,000 remained displaced, most in “accommodation centers” (OCHA, 2000:6). It was not until mid-April that flood waters had receded, transportation links had again been fully established and the ground dried enough that most were able to return home.

By the end of March most of the militaries had terminated their operations. Those regions requiring the airlift of supplies relied on the GOM, the UN, or other donor humanitarian organizations for support. Overall, the relief effort was effective: while many suffered from dislocation few, died of hunger or disease. In total, the devastation of the floods affected an estimated 5-million people, created over 544,000 IDPs, and caused the death of 699 persons. The various air forces contributions to the nation’s survivors were tremendous. By 26 May, aircraft had flown an estimated 9,615 hours (5,398 by military aircraft) and carried 11,789 tons of cargo and 13, 711 passengers, and performed other required missions (OCHA, 2000:13).

4.2 USAF Operations in Mozambique

At the same time EUCOM deployed the HAST to Mozambique, Major General (now Lt Gen) Joseph Wehrle Jr., 3 AF commander, put his staff in motion. He stood-up the 3 AF Contingency Response Cell (CRC) and prepared courses of action (COA) as EUCOM evaluated the potential standup of a JTF. Lt Gen Wehrle was in daily—sometimes hourly—contact with the HAST, EUCOM, and USAFE in development of the COAs (Sligh, 2001: Correspondence). As information filtered from Mozambique, it was evident the effects of cyclone Eline

greatly exceeded the response capabilities of the humanitarian community and governments of the Southern Africa region. CNN and other major news agencies reported Mozambicans clinging to tree tops, daring rescue efforts by deployed military forces, and damaged transportation links illustrating the nation's plight (Sligh, 2000:no-page). The "CNN effect" would strongly influence the COA selected by the US government and EUCOM (O'Brien, 2001:Interview).

Air Mobility Command's designated DIRMObFOR, Col "Taco" Gilbert, and his small staff deployed to EUCOM to evaluate the strategy for movement and possible beddown of strategic assets. They also assisted EUCOM in evaluating the COA presented by 3 AF. From the planning sessions came two road blocks which required attention prior to US forces moving into action. The first originated from the humanitarian assistance exercise BRILLIANT LION, a medical flag (MEDFLAG) exercise scheduled in March in the central African nation of Cameroon. Nearly all of the participants involved in the exercise would be instrumental in the Mozambique operation if the US military were directed to respond.

The second limiting factor was the difficulty in locating and getting approval for a forward operating base (FOB) for the US operation. Due to the floods and saturation of usable ramp space at Maputo International Airport (IAP), EUCOM was required to find an FOB that possessed adequate infrastructure, yet was close enough to allow optimization of aircrew duty limitations for the intratheater lift. After lengthy negotiation and some indirect influence from the international media, the Republic of South Africa allowed the US to use AFB

Hoedspruit near the South Africa-Mozambique border, 70 miles from Maputo IAP as the FOB for strategic and intratheater lift (Sligh, 2001:no-page).

On 4 March 2000, EUCOM acted on orders from the National Command Authority (NCA) and established JTF-ATLAS RESPONSE to compliment the international relief efforts in Mozambique. The 3 AF-led JTF deployed to AFB Hoedspruit South Africa on 6 March (Sligh, 2001:no-page). JTF-AR deployed with four key objectives: search and rescue (SAR), coordination and synchronization, relief supply distribution, and aerial assessment. By the time the JTF-AR assets arrived, SAR operations were almost complete and the international focus turned to relief operations (Wehrle, 2000:Interview)

During the assessment and planning phases, the HAST had been engaged with the US embassy country team in an effort to establish the support needs of the US for the relief effort. In addition to the country team, the HAST coordinated with the representatives from OFDA in an effort to build a unified US execution plan for relief operations (Owens, 2000:Interview). Dreyer noted that NGOs wanted three things:

1. Logistical support.
2. Assistance in the coordination of airflow.
3. Assistance in bridge and road repair.

During examination of these requests, the HAST made several observations to EUCOM. To the first request, they recommended funding the South African helicopters in lieu of deploying US assets. C-130 operations were a potential option, but few airstrips could support their operating weight. To the

second request, the HAST felt that if a JTF were deployed, one of its strengths would be to help coordinate air operations. As far as the lines of communications were concerned, there were five roads and five bridges would help relief efforts if repaired. The HAST was reluctant because it was a long-term issue and was seen more as nation building, but the CE member of the team looked into it. The courses of actions were to be EUCOM's call (Sligh, 2001:no-page).

As was previously identified, the USAF can contribute three unique strengths to an HA/DR situation—logistics, coordination, and security. Maj Gen Wehrle specifically identified the unique abilities of intratheater airlift, air refuelable helicopters, aerial assessment, and ground support-handling equipment. An additional recommendation from JTF-AR was the deployment of C-130 aerial spraying aircraft to control the spread of disease; however this was declined by the NCA (Wehrle, 2000:Interview).

On 3 March, seven C-130 aircraft departed Ramstein AB, Germany. These aircraft include three equipped for Keen Sage operations, a special package mounted in an USAF C-130 aircraft capable of performing real-time aerial assessment. Of interesting note, the aircraft departed prior to final selection and approval of a FOB. Given the aircraft three day transit time, Lt Gen Wehrle believed he could route the aircraft appropriately as they neared Mozambique—and it worked (Sligh, 2001:Correspondence). Along with the aircraft, crew, and support for the deploying aircraft were members of the 86 CRG who would provide support for the up-loading and down-loading of the military aircraft as well as the many contracted civilian aircraft. They were to play

a major coordination role in assisting the IO/NGO community getting their relief supplies moved throughout Mozambique. Their deployment was completed by 8 March.

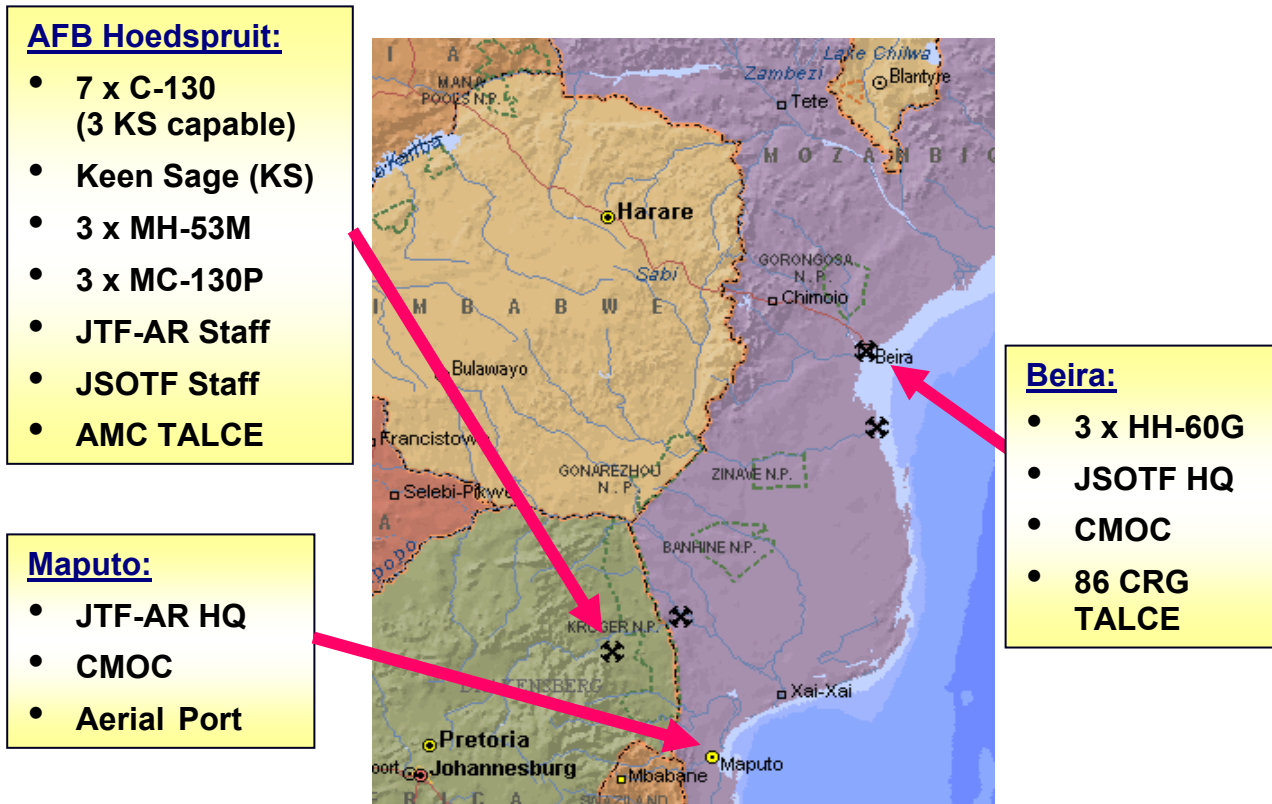


Figure 4-2: JTF-AR Bed-down

Sligh, 2001:no-page

At the same time strategic airlift transported the Air Mobility Command's (AMC) Tanker/Airlift Control Element (TALCE), three HH-60 helicopters which were enroute to the US from Southwest Asia, and three MH-53 heavy lift helicopters from the 352nd Special Operations Group, RAF Mildenhall, UK, were tasked to deploy for support operations. The transition from intertheater airlift to

intratheater airlift operations began 7 March when deployed forces began executing intratheater relief flights.

Immediately following cyclone Connie, a UN Disaster Assistance and Coordination (UNDAC) team established a coordination center in Maputo to organize relief operations at the request of the GOM. While the UN efforts contributed to the coordination of operations, it was less than 100 percent effective. By 24 February the UNDAC team, noting that conditions had returned to within the scope of the INGC emergency action capabilities, left the coordination process and allowed the INGC to take over running the daily relief coordination meetings. After the passing of cyclone Eline, the UN OCHA directed the return of a second UNDAC team to assist in coordinating UN operations. Given the coordination structure established previously and run now by the INGC, the UNDAC team established an on-site operations coordination center (OSOCC) next to INGC offices and began to facilitate the coordination process. (O'Brien, 2001:Interview).

When the HAST and later the JTF-AR arrived, they found initial coordination for aerial movement inefficient due to confusion and lack of organization on the airfield. According to Mr. Owens, OFDA representative in Mozambique, "the UN and INCG were initially weak in assessing and organizing operations. Requests by the IO/NGOs for air movement were done by relief agency representatives walking the flight line asking rotary-wing and fixed-wing aircraft for support. As a result, movement of supplies was disjointed and often ineffective" (Owen, 2000:Interview).

On 1 March, the civil affairs personnel from the 96th Civil Affairs Battalion, which were previously planning operations in Cameroon with EUCOM and 3 AF, were redirected to deploy to Mozambique as part of the advance echelon (ADVON) team for a possible JTF (JTF-AR was not designated till 3 Mar). Maj Gen Wehrle added to this team several members of the 3 AF staff to include Major Michael O'Brien (Now Lt Col), who would be instrumental in helping to establish the Maputo military coordination center and the initial JTF-AR airlift mission. The ADVON team was to plus up the HAST from 12 to 22 people, and provide further preparation for bed down of the future JTF (O'Brien, 2001: Interview).

To assist and fill the gaps in the coordination of the international relief efforts, the HAST chief informed the UN and OSOCC of the intent to establish a military coordination center to act as liaison with the humanitarian agencies. The military coordination center's objective was to: "provide an overall coordination center for synchronizing JTF, multi-national, and civilian relief efforts" (Sligh, 2000:no-page). The first CMOC was established on the seventh floor in the former Ministry of Agriculture building (O'Brien, 2000: Interview). The UN OSOCC Joint Logistics Operations Center (JLOC) sector desk—a very military sounding term, which sometimes confused folks—was established adjacent to and run simultaneously with the JFT-AR CMOC. According to Lt Col O'Brien, the JLOC and the CMOC ended up together through some excellent foresight of Lt Col Dreyer.

I believe Lt Col Dreyer was in a position at one point to say to the UN - and I believe this would have been around the 1st of March - We're going to be setting up a CMOC. You are planning to set up this JLOC. Let's put them on the seventh floor together....because it will be mutually beneficial for us to be co-located (O'Brien, 2001:Interview).

This relationship simplified the coordination process among all parties and proved beneficial as JTF-AR worked their exit strategy later in the operation. The HAST chief, Lt Col Dreyer, following some encouragement by Maj Gen Wehrle, coordinated for JTF-AR to establish a second CMOC in Beira. The CMOC director, USA Major Burns, used the same philosophy as the CMOC in Maputo by setting his operation up in the same building as the UN and Mozambique coordination centers. While the Maputo CMOC was opened to all parties and transfer of information between organizations was the standard, each organization operated in its own room. The Beira CMOC, on the other hand, opened its doors to the IO/NGO community and developed an open work center for all the organizations participating in the relief efforts. (Burns, 2001: Correspondence). The success of both organizations provides testimony that in an HA/DR environment, the ability of organizations to build unity of effort derives from an open willingness of all parties to work hand in hand and share information to achieve the mission objectives. Upon the receipt of the execute order of 6 March, the HAST officially terminated its role and its members filled critical positions in the CMOCs and become the core of the JTF-AR forward, based in Maputo (JTF-AR rear was to be based in Hoedspruit AFB)

According to Maj Gen Wehrle, while he expected to see the coordination efforts disorganized and inefficient, he was pleasantly surprised to see a

rudimentary coordination system, including an air tasking order (ATO) type system, monitoring the movement of the over 40 aircraft. As an overall strategy to fill the gaps in the IO/NGOs system and to ensure the INGC and the UN were perceived as leading the show, Gen Wehrle directed the JTF-AR to fold their operations into this system including the ATO (Sligh, 2001:no-page). In addition to assisting the coordination of the relief movements, the CMOC collected and displayed information on IDPs and built a database—later turned over to UN OSOCC, which became the standard communications conduit for all IO/NGOs. As noted by US Army Civil Affairs officers, the data base assisted in providing synchronization with all agencies throughout the relief operation and contributed significantly to the JTF-AR meeting many of its objectives (Burns, 2001: Correspondence). A second tool used to help synchronize the coordination process was the establishment of a corkboard outside the CMOC where the IO/NGOs placed their cards. This enabled the IO/NGOs greater opportunity to find and coordinate with other agencies providing relief. It was a very simple but effective tool (Sligh, 2000:no-page).

IO/NGOs began their submittal process for airlift at the CMOC, where they were directed to complete appropriate requests for the airlift of relief supplies. These requests were then delivered by the requesting organization to the JLOC, where they were prioritized per INGC direction and matched with the capabilities of assisting ground and airlift assets. At 1500 hrs, the JLOC forwarded these requests to the Air Coordination Cell (ACC) at Maputo IAP to arrange airlift taskings. While the JTF established the ACC and acted as a subset of JTF-AR

J-3/J-4, a Royal South African Air Force pilot chaired the meetings since South Africa had been operating in the region for several months. Additionally, this was yet another way the JTF-AR ensured the members of the international community stayed in the forefront of the overall response efforts. The chair presented the individual relief requests to the airlift representatives. Based on the requirement and capability, the military or UN airlift assets accepted the missions. By 1700 daily the JTF-AR USAF representative would select compatible loads and fax the request to the JTF-AR J-4 and AMD for validation and mission planning. The C-130s positioned the relief supplies to and between Maputo and Beira, while the air refueling helicopters moved the supplies to outlying areas for IO/NGOs for dispersion to flood victims. While the primary office for the ACC was adjacent to the CMOC, the USAF representative, Major Scott Howe spent a majority of his time at the Maputo airfield. According to Lt Col O'Brien,

Basically, Maj Scott Howe was the lone guy doing ACC stuff, and he basically was on the road the whole time - either going from the 0900 hrs meeting at the JLOC out to the airfield at 1500 hrs, and then over to the HQ JOC in the hotel. For a variety of reasons it just never developed that he was in a position to be located there near the JLOC and CMOC. I think it might have been helpful to have had another one or two folks that could have stayed in the INGC in an ACC office there. They could have been in communication with Hoedspruit, with the airfield, with the TALCE folks, and could have answered a lot of questions that arose during the day that were often directed to us in the CMOC. (Sligh, 2001:no-page)

Major Burns echoed Lt Col O'Brien's thoughts concerning the USAF representative in the ACC at Beira. He stated that USAF Capt Scott Stewart's, the ACC representative at Beira understood the airlift movement of supplies,

facilitated the coordination of JTR-AR assets, and significantly improved the overall humanitarian operation (Burns, 2001:Correspondence).

Besides the traditional role of logistics support, the USAF brought a new aerial assessment capability to the humanitarian operations called Keen Sage. Coordinated through the JLOC and JTF-AR J-3/J-4 the C-130 based Keen Sage provided the JTF-AR and the other international organizations—namely UNDAC, USAID, and the INGC—with a primary means of acquiring real-time assessment via aerial photography of lines of communications, with a tertiary role of locating any additional IDPs outside of assistance channels. The Keen Sage aircraft were not part of the JTF-AR airlift pool for movement of supplies; rather, the request for assessment came from the JLOC direct to Hoedspruit for coordination. While Keen Sage experienced a few growing pains such as duplicated assessments and some misgivings from the international community of its intelligence gathering capabilities, its overall appraisal was positive. As Maj Gen Wehrle indicated, this capability was instrumental in the effective dispersion of relief supplies as well as helping to facilitate the JTF-AR's exit strategy.

Of major concern for JTF-AR was the monitoring of the end-state triggers. The CMOCs in both Maputo and Beira were monitoring the situation daily. As they monitored the reduced demand for airlift, the OSOCC, and INGC meetings—moving from daily to every other day to even once or twice a week—they would pass this information to Maj Gen Wehrle and place it in their daily situation reports. According to Lt Col O'Brien, the greatest difficulty from the CMOC perspective was to have another organization namely the JLOC, take

over as the information conduit for the coordination process. Once the JLOC finally accepted its new role, the departure progressed with few other problems.

Maj Gen Wehrle had to work the political avenues for departure at the same time. He relied on information concerning LOCs from Keen Sage, the Rapid Needs Assessments (RNA) done by the IO/NGOs collected at the CMOC, and the waning demand for military airlift as indicators that the end state triggers had been reached and redeployment of US forces could begin (Wehrle, 2000:Interview). Mr. Mike Elmquist, Chief, Disaster Response Branch, Geneva, also wanted to ease the military out of the Mozambique operation. Mr. Elmquist believed the triggers for military separation from the relief operations had been reached, and it was time to shift the movement of supplies from expensive military airlift to contract civilian carriers to lower the cost of the operation and provide needed economic sustainment to the country (Sligh, 2000:no-page).

With the concurrence of the US Ambassador, the NCA, and the government of Mozambique, Maj Gen Wehrle and the DIRMOBFOR began JTF-AR redeployment near the end of March. By 1 April, all US assets and personnel had departed Mozambique for their respective home stations.

4.3 Lessons Learned from JTF-AR

The overwhelming success of USAF-led JTF-AR reveals four lessons the USAF should follow in preparation and execution of future humanitarian responses.

First, the US military must “fill in the gaps” with unique capabilities to aid the overall effort. This was accomplished by two distinct actions. Prior to

deployment, the HAST successfully coordinated with the US Embassy country team, OFDA, and the INGC to resolve what capabilities and equipment were needed to support the relief efforts and to match those needs with the capabilities of the USAF. Given the lack of lines of communications, saturated ramp space, and limited fuel supplies, the JTF-AR determined that intratheater C-130s, refuelable helicopters, and Keen Sage were the optimum assets to deploy in support of relief operations. This ensured the USAF only brought those assets to 'fill the gaps' in capabilities the international community could not provide, thus preventing costly duplication and promoting unity of effort (Sligh, 2000:no-page). Mr. Owens of OFDA echoed this sentiment. He stated that as well as contributing to the successful relief operation, correct selection of relief support limited the utilization of costly USAF assets—promoting unity of effort and preventing the refugees from becoming dependant on US equipment that would not be sustainable in the future (Owens, 2000:Interview).

The second lesson learned stems directly from one of JTF-AR's original mission objectives—facilitate the coordinating and synchronizing of the military's operations with that established by the international community. In HA/DR operations, the success of the military mission is often dictated by the success of the international relief community. It is in the military's best interest to facilitate coordination with the international community (Burns, 2001:Correspondence). The response community is often characterize by organizational agendas, disorganization, and an unwillingness to subject their operations to a formal command and control structure. JTF-AR facilitated the breakdown of these

barriers and enhanced organization through the establishment of a CMOC in the GOM Ministry of Agriculture along side of the OSOCC and the INGC. The JTF's objective was to set-up a CMOC, organize its operation, facilitate communications, and then step-back (Wehrle, 2000:Interview).

While setting up a CMOC provided the structure for organization, a catalyst was needed to entice the IO/NGOs work with the military. This catalyst came in the form of information management of activities and resources. The GOM and OSOCC required all requests for logistics support to follow a formal chain. Initially this began at the CMOC and worked through to the JLOC and ACC. As the process formalized and the IO/NGOs gained familiarity, they went straight to the JLOC with their request. The CMOC also used a tool affectionately know as the "white board". According to Lt Col O'Brien, this was the only source within the Ministry of Agriculture building providing information on all the IDPs. The data was collected by CMOC representatives from the OSOCC sector desks and the INGC and placed on the board. IO/NGOs would come to the CMOC to review the board and provide needed updates, which were annotated and forwarded to the GOM and the UN (O'Brien, 2001:Interview). As the CMOC began to transfer its operations to the JLOC, the data from the 'white board was also moved. As well as an information conduit, the CMOC served as the to the abundance of military resources available, both airlift and other service support. By the USAF offering capabilities that filled the gaps such as logistical support and airlift coordination, the international community became willing

participants with the military-organized CMOC and ACC as well as the OSOCC-run JLOC (Sligh, 2001:no-page).

Third, the JTF-AR allowed the GOM and to a greater or lesser degree the IO/NGO community to establish the priority and agenda for the response. In this way they worked with the IO/NGOs to help them understand their leadership responsibilities—that must set take the lead and set the agenda for relief operations (Sligh, 2000:no-page). According to Maj Gen Wehrle, “the US has a reputation around the world of being a bully, so we [USAF] felt that we needed to coordinate and synchronize our actions with whatever system was going on with other militaries, the international organizations, and the NGOs in the area” (Lowe 2001:no-page). Maj Gen Wehrle and his staff insured the INGC and the UN were in the forefront of operations. The UN in their report, The UN Role in Coordinating and Mobilizing Humanitarian Assistance to Mozambique Following the Disaster Flood, stated the willingness of military forces to coordinate with the civilians and the UN contributed to the growth of a strong partnership (OCHA, 2000:18). For the USAF, the DIRMOBFOR had this to report, “Despite continuous engagement with the organizations, problems with late, non-palletized and hazardous cargo was challenging...the sacrifice of lift capability seemed as a small price to pay for the heading we made with the IO/NGO community” (Gilbert, 2000:no-page).

The final two lessons learned from JTF-AR—avoid looking like a “big dog” by thinking you can do the mission by yourself and develop an exit strategy early and work with all parties to execute it together—are applicable to any JTF for

HA/DR operations. As will be examined in chapter six, these two lessons are integral parts of understanding the difference between a combat JTF and a HA/DR JTF.

Maj Gen Wehrle emphasized a caution against valuing the success of JTF-AR as template for USAF's future humanitarian operations. His insight is accurate, given other humanitarian response efforts in which the USAF has been engaged. For example, JTF-SUPPORT HOPE in Rwanda and JTF-PROVIDE HOPE in Somalia—both had high levels of intratheater airlift operations. Unlike JTF-AR, however, each of these humanitarian operations lacked central governments to provide guidance and set priorities for relief operations. In the case of JTF-AR, the GOM maintained a strong position and actively influenced operations. Closely aligned with government control was the singular focus of the international community—rescue the victims and provide relief to the IDPs. Maj Gen Wehrle's caution is also echoed in Joint Publications 3 – 07, 08, and 57, which emphasize the need for a basic template for the tactical response to humanitarian disaster; however, they reiterate the need to structure and react independently of previous operations.

4.4 Conclusion

The results of this case study reveal that the successful role the USAF played, as the lead agency for the US military did not come by coincidence. Rather, much of the credit goes directly to the training as well as the professionalism and expertise of the USAF personnel whom deployed to Mozambique. While experience with the UN or IO/NGO community were not

widely held by most USAF personnel, this was not the case for 3 AF. Their experience in disaster response Exercise TRAILBLAZER 00 (Oct 99) with its panels of IO/NGO experts, visits to relief organizations in Geneva including attending the Civil-Military Co-Operation (CIMIC) course provided by OCHA, the 3 AF sponsored field Exercise GUARDIAN ASSISTANCE at RAF Fairford UK and a tour of Sub-Sahara Africa provided the fundamental skills necessary to effectively operate within the civil-military environment during humanitarian operations. When a humanitarian relief environment utilizes intratheater airlift and/or other unique assets such as Keen Sage or air refuelable helicopters, USAF personnel must be part of the civil-military community to ensure optimization of these assets. As Mr. Owens stated, “the CMOC should be purple at all expense...” (Owens, 2000:Interview). Since Army civil affairs officers—who are traditional members of the CMOC, and USAF personnel have different skills USAF personnel should be used as complimentary forces—not replacements. This point is instrumental to discussions in chapter five. While this chapter provided evidence that trained USAF mobility experts facilitate synchronization, unity of effort, and the JTF exit strategy, the following two chapters will focus more in depth on involvement of USAF mobility experts in HA/DR operations and the training they received prior to their deployment. The chapters will also introduce why the KSAs for HA/DR are unique for the USAF mobility experts and which KSAs the mobility experts should pursue to meet the objective of future HA/DR operations.

Chapter 5.0 USAF Operations During HA/DR

In the last decade, the international community has made significant progress in curtailing the long-term effects of humanitarian crises despite the continued growth of world populations and natural and man-made disasters. However, current and projected political, social and natural disasters warrant improvements to the response capabilities of each international support organization involved—the military included (Kunder, 2001:Interview). The future success of these operations will rely heavily on how well the USAF is prepared for their execution. Therefore, it is the responsibility of the USAF to prepare for these crises by organizing, training, and equipping its forces to meet the objectives set forth by the NCA. This chapter examines the role of the US military and USAF in HA/DR operations. Additionally it will expand on the previous chapters discussions of the role of USAF mobility experts in joint task force HA/DR operations with special emphasis on JTF-AR. From analyses of these operations, inferences will be gained that provide evidence showing the USAF should pursue specialized training for the HA/DR environment.

5.1 Setting the Stage

During the 1990s, US Government civilian agencies and the DoD responded to the systematic break-up of African and former Soviet block nations and the deliberate genocide accompanying their collapse as well as the chaos associated with natural disasters such as hurricanes, earthquakes, and famine. In many of these HA/DR operations, the US government utilized non-military

resources, which proved effective both politically and financially. However, in many other circumstances, the US military possessed more capabilities to act quickly and effectively to shape the dynamics of the situation. The military made significant progress in mitigating or even resolving the underlying conflicts or disputes (PDD-56, 1997:3). As a matter of principle, both the military and civilian officials prefer that the military accomplish tasks unrelated to its core mission only on an exceptional basis (i.e., when no civilian agency can do the job quickly enough or well enough under the circumstances) (Byman et al., 2000:27). When greater problems arise, the US government calls upon its military for unique capabilities. The military and particularly the USAF,

- have assets that are quickly available
- are uniquely trained and equipped for hazardous duty
- often provide a political and/or strategic benefit when used in humanitarian endeavors
- are able to bring with them a complex web of capabilities and organizational structure that can be put into place in an area where the ordinary civil institutions may not be functioning because of man-made or natural disasters. (Lambert et al., 1992:VI)

Engagement in MOOTW is an integral part of our nation's military strategy. "While we have historically focused on warfighting, our military profession is increasingly changing its focus to a complex array of military operations—other than war" (Joint Pub 3-07, 95:I). As addressed in chapter one, this includes the lesser end of the MOOTW spectrum of HA/DR. The

Commander-in-Chief (CINC) USEUCOM has outlined 11 objectives in his 'strategy for readiness and engagement'. Objective 9 is to provide prompt response to humanitarian crises. This objective goes further when one recognizes that the social nature of Africa will require military capability to prevent the potential for widespread loss of life (EUCOM, 2001). Humanitarian assistance and disaster response is also one of US Pacific Command's (PACOM) six strategies for the pacific region (PACOM, 2001).

It is evident the US military will continue to engage in HA/DR operations throughout the world (Byman et al., 2000:1). Consequently, the military has taken steps to prepare for operations through doctrine, exercises, education and training. Given this fact, the next question that must be asked is whether the USAF, and specifically its mobility experts, have the correct doctrine, education, and training to meet the requirements to support this pillar of national military strategy?

5.2 USAF Engagement in Humanitarian Intervention

Of the five supporting services to include the Coast Guard, the USAF maintains the unique capability to provide relief anywhere in the world with no appreciable delay in response. The USAF maintains a robust airlift capability unmatched by any nation in the world and has the ability to organize large-scale operations. The USAF's high level of readiness, rapid response, global reach, heavy lift, sustainability, and capacity to go where other services cannot, provide the US government a unique capability to respond to the full spectrum of complex contingencies (Lembert and Wolf, 1992:12). The USAF plays an

essential role in supporting other services in addition to providing relief logistics for HA/DR. Consequently, airlift's global response and its intratheater capabilities play an integral part in achieving the JTF/CC's and, ultimately, the NCA's overall objective.

For the USAF, operational engagement within the HA/DR environment will continue to increase worldwide. Supporting these missions through airlift is not a new phenomenon; rather USAF involvement can be traced back to the Army Air Corp. Just 12 years after establishment of the Signal Corp Aeronautical Division the airplane became an instrument of disaster relief. Since that time the USAF has continued to expand its operations. Between 1947 and 1992 over 560 airlift operations were conducted worldwide (Haulman, 1998,3). While the Soviet military collapse lessened the risk of large-scale war between the major industrial powers, the world is not more peaceful. USAF operations in support of HA/DR crises worldwide have grown from an average of 12 operations per year in 1992 to over 20 operations per year in 2000 (Haulman, 1998;5). One of the primary reasons for the growth of USAF's operations in HA/DR stems from its rapid ability to provide a massive and sustained logistical network directed at relieving human suffering. This capability exceeds that of any other nation—thus solidifying the USAF's role as a leader of air forces worldwide in response to HA/DR crises. This in no way implies the inability of foreign military's air forces to react when called. Nations such as the U.K., France, Canada, and Norway have participated successfully in curbing the devastation of humanitarian emergencies for many

years. However, their limited assets compared to the USAF limit their overall contributions (Cobb, 2001: Interview).

The USAF's strength in rapid global response has been seen as a key tool in supporting the nation's international engagement efforts. According to former Chief of Staff of the AF General Ronald R. Fogleman (Ret):

I have traveled around the world and talked to people in different countries. I can tell you that when that big "T" tail aircraft lands, with the American flag on the tail, they not only represent America—they are America. (AFDD-2, 1999:31)

Lt Col Steven D. Ecker, USPACOM, CA Division Chief, echoed Gen Fogelman's thought by stating that the humanitarian airlift of supplies to China after floods impacted over 3 million people did little to counter the devastation, but it sent a strong political signal to the nation and its citizens.

The DoD currently has legal authority to task the USAF to carry cargo for four types of humanitarian operations—humanitarian assistance/disaster relief, excess property program (The Economy Act), Denton Space Available transport, and Title 10 Humanitarian/Civil assistance (Lembert and Wolf, 1992:18). A bulk of USAF civil emergency operations falls under the legal category of HA/DR. The airlift of supplies (shelter, food, water, and medicine) for operations in Mozambique, Rwanda, and East Timor exemplifies of this type of disaster relief support. The excess property program allows the US military to donate non-lethal excess DoD property to foreign governments and to other recipients for humanitarian purposes. The USAF airlifted a 2.5 ton truck and a forklift, in addition to medical, food and water relief supplies, under excess property for India following its devastating earthquake (Cobb, 2001: Interview)

While the HA/DRs take up the bulk of operations, by volume, the greatest support that USAF mobility experts supply to these four types of missions is through the Denton Cargo program. Started in 1984, the method of moving humanitarian supplies via space-available airlift makes it difficult to accurately quantify the effort and gain a clear picture of its effect. For the Denton cargo efforts, the USAF is only responsible for cargo movement between the aircraft departure and arrival points. Those organizations that request airlift of the cargo are responsible for its delivery, pick-up, packaging and adherence to USAF cargo instructions. Finally, the Title 10 Humanitarian Assistance program authorizes DoD to spend a certain proportion of its operations and maintenance budget to enable its forces deployed overseas to provide humanitarian and civic assistance that is “incidental” to authorized operations (Lembert and Wolf, 1992:20). The exercise MEDFLAG held in Cameron in the spring of 2000 and COBRA GOLD held in Thailand are examples of the many hundreds of Title 10 operations, large and small, taking place within all the CINC’s areas of responsibilities (AOR).

Of the four categories outlined above, disaster response, and to a lesser degree Title 10 Humanitarian Assistance, requires the USAF to develop unique KSAs to operate effectively in the HA/DR environment. Categories two and three do not vary from the mobility experts’ day-to-day missions and wartime taskings and thus do not require special training. Category four serves two roles: first to compliment the CINC’s theater engagement strategy, and second, to train our forces in preparation for the first category, HA/DR. As was related in chapter

four, the preparation for MEDFLAG by 3 AF served to strengthen its capabilities for contingencies such as JTF-AR.

5.3 USAF Integration into HA/DR JTFs

The best illustration of the critical role USAF mobility experts can provide is through examination of several HA/DR operations. No operation rivaled the Berlin Airlift in the realm of HA/DR until Operation PROVIDE PROMISE began in 1992 when AMC—US and German based—aircraft delivered humanitarian supplies via airlift to the city of Sarajevo and via airdrop throughout the rest of Bosnia-Herzegovina. In addition to flying operations, the USAF was a key participant in the joint US-Allied Air Cell (based in the UNHCR in Geneva, Switzerland) that managed the airlift and airdrop operations. Deployed USAF members of the EUCOM staff filled positions and worked integrally with the UN, IO/NGOs, and foreign nation services to ensure continued and sustained relief operations to the AOR (Owens, 2000: Interview). While the airdrops have since terminated and Operations PROVIDE PROMISE has transitioned to Operation JOINT ENDEAVOR following the Dayton Peace Accords, the USAF has deployed airlift planners to the Allied Air Cell during every major operation requiring the coordination of airlift operations with the international humanitarian community. Most recently, EUCOM sent members USAF mobility experts to coordinate the integration of flights between the North Atlantic Treaty Organization's (NATO) Regional Air Movement Coordination Center (RAMCC), Vicenza, Italy, and the UN and IO/NGO community during Operation SHINING HOPE. The liaisons coordinated airfield slot times at Skopje, Macedonia, Tirana,

Albania, and Pristine, Yugoslavia. In addition in 1995, the US military assigned a permanent USAF officer on the staff of the US Mission, Geneva, to help the US military coordinate operations with the UN and other IO/NGOs.

The majority of USAF HA/DR deployments have occurred in Africa. During JTF-PROVIDE RELIEF (JTF-PR), operations in Mogadishu, a large contingency of intratheater airlift assets played a key role in the significant movement of relief supplies through the distressed nation. On 1 December 1992, there were six C-130s supporting operations. At the peak of operations in mid-January, the air component at Mombasa, Kenya, the airlift operations base, included 700 personnel of which 560 were USAF, supporting 22 C-130s, and 3- C-160s (Martinson, 1993:no-page). The joint/combined air component included assets from USAF active duty and guard units, US Marines, the German Air Force and the U.K Royal Air Force. The assets were tasked under the JTF Somalia Air Component Commander, Brig Gen Mikoljcik. He validated taskings coming from JTF Somalia joint movement center through the AMD via a daily movement schedule (Martinson, 1993:no-page).

In January, all parties agreed to fly four of the 13 daily committed C-130s on food relief missions for a total of eight food sorties per day. With this decision, the Air Component Commander was able to deliver the DART from OFTA, based in Mombasa, useful planning factors for the discussions with field representatives in Somalia. This coordination significantly improved customer support to the relief operations while supporting the JTF-PR commander (Martinson, 1993:no-page). Interestingly, prior to the buildup of US forces in early December, six

USAF C-130's were tasked daily to provide support for the International Committee of the Red Cross/Red Crescent (ICRC) (Byman et al., 2000:127).

One of the main points made by the DIRMObFOR for JTF-PR, was that the training he received at the Commander Mobility Forces Seminar he attended in 1992 was instrumental in the success of JTF-PR air operations. This same course has moved to the Air Mobility Warfare Center (AMWC) and is now titled the Director of Mobility Forces Course. It provides senior air mobility commanders a breadth of knowledge for their roles and responsibilities as a DIRMObFOR, and training in USAF and Joint Doctrine. It also includes presentations on US government agencies and IO/NGOs they must interact with and support during HA/DR operations.

The case of JTF-AGUILA, the US military response to Hurricane Mitch disaster relief efforts in El Salvador, Guatemala, and Nicaragua, shows what happens when USAF mobility experts are not integrated effectively into a JTF. This lack of integration contributed to the ineffectiveness of the JTF's operations. The necessity of speed mandated that the initial deployment for almost every unit sent to the region be made via strategic airlift. The C-141s, C-5s, and C-17s of AMC transported all of the JTF's original equipment totaling over 25.0 tons of supplies and personnel (Gilhool, 1999:12). Intratheater lift was conducted by UH-60 Blackhawks from 4-101st Aviation and CH-47 Chinooks from the 7-101s Aviation Battalions, USA, which made up Task Force Eagle Lift (Gilhool, 1999:19). USAF C-130s did move the heavier equipment within the theater. While the JTF-AGUILA was primarily USA run, with 70% USA personnel and

equipment—the lessons learned identify the necessity to have well trained personnel, including USAF mobility experts, in the most applicable JTF staff positions. One such lesson learned states that the JTF with responsibility of humanitarian assistance must have experts early in the operation to conduct mission analysis and initial planning (Gilhool, 1999:34). A second point was brought up by the 350th Civil Affairs AAR that reported numerous cases of airlift limitations and shortfalls. The original humanitarian operations center (HOC) and the two mini-HOCs focused on two primary areas of concern: 1) coordination of airlift arrival of disaster assistance supplies and their subsequent distribution and 2) establishment of base camp operations (Monroe, 1999:4). None of the HOCs had any USAF personnel much less any mobility experts who were knowledgeable about airlift or logistics movements.

Additionally, at the Guatemalan Airborne School, San Jose, a USA CA Spanish speaking NCO in the airfield control tower acted as a translator and controller to US military fixed wing and rotary wing aircraft (Monroe, 1999:7). This was a poor utilization of a valuable CA asset and created a potentially dangerous environment for airlift operations. While introducing the placement of a qualified USAF controller into the tower steps beyond the early-established premise of this research paper, it illustrates that USAF personnel, to include mobility experts, should fill vital roles during HA/DR operations.

Finally, the 350 CA AAR cites tremendous difficulties coordinating movement of intratheater lift. Nearing the end of operations airlift had pretty much dried up—making movement of personnel and equipment for JTF-BRAVO

virtually impossible (JTF-Bravo was a standing in Soto Cano, Honduras, and was tasked to help with disaster relief in Honduras). The inefficient allocation and scheduling of airlift had direct effects on the CA performing its duties for JTF-BRAVO (Monroe, 1999:9). As US military operations supporting Hurricane Mitch proved, a future JTF can benefit from key filling staff with skilled and knowledgeable mobility experts even when another service has taken the lead. In some instances, an effective air mobility division within the JTF can minimize these problems, but unless other positions within the staff and humanitarian coordination centers fully understand the capabilities and limitations of airlift, problems will ensue.

While USAF mobility experience was limited in many instances for JTF-AGUILA and BRAVO, the success of the logistics support at Soto Cano Air Base demonstrated the integral role mobility experts play in the success of an air operation. Capt Tim Lee, the Air Force Forces Logistics Commander (AFFOR/LG) arrived in Honduras one week prior to JTF-BRAVO assuming its new mission of Hurricane Mitch Disaster Relief. Following the devastation left by Hurricane Mitch, Soto Cano Air Base found itself at the center of the crisis; the only fully operational airfield left in the region it became the Intermediate Staging Base (ISB) for all Humanitarian relief and sustainment operations in Honduras, Nicaragua, El Salvador, and Guatemala. The AFFOR/LG was tasked with ensuring the continued movement of relief supplies for the JTF on the ground and in the air. This was no easy task given the magnitude of airflow through the aerial port, move than 23,000 tons and 6,000 personnel. With aircraft from

around the world literally dropping from the sky, their first task was to develop the Intermediate Staging Base Concept of Operations (ISB CONOPS) to include a detailed plan for air operations in the theater. In order to get eyes on the objective requirements Capt Lee worked with the CMOC to have all host/foreign nation governmental and IO/NGO representatives operate in a hanger at the airfield along side the AFFOR/LG to coordinate logistics support. Capt Lee and his 34-man team established taxiing, parking, cargo marshaling, passenger processing, aircraft unloading and loading, refueling, maintenance, and additional contingency support plans to handle the myriad of challenges an operation like this presents. According to Capt Lee close coordination with the vast number of organizations was vital to enabling onward movement and distribution of the lifesaving cargo (Lee, 2001:Interview).

For missions tasking, the AFFOR/LG worked with the foreign nations and IO/NGOs to coordinate prioritized logistics requests through the CMOC. From there the request went to the Honduran Government for validation and coordination and then to JTF-BRAVO's JMC and JOC back to his team for support and execution. This arrangement ensured a clear coordination process for all relief agencies working at Soto Cano Air Base. During the early phases of the operation, JTF-BRAVO relied solely on fixed and rotary wing aircraft to perform the mission as all roadways were severed. As the operation progressed and lines of communications began to re-open, JTF-BRAVO focused efforts on land based convoy support to areas that were accessible, however, fixed and

rotary wing support was absolutely essential in remote areas where ground assets could not reach the populace.

In addition to ISB operations at Soto Cano Air Base, Capt Lee coordinated air mobility operations at four forward operating bases (FOB). These additional bases coupled to operations at Soto Cano Air Base increased the need for clear, concise coordination with the foreign nations and IO/NGOs. While The AFFOR/LG was able to provide outstanding support to this operation, Capt Lee felt his teams efforts could have been strengthened had they received training with regard to IO/NGO operations and multi-national airfield dynamics.

Even more recently, a USAF mobility commander, Maj Gen Robert Boots, led JTF-AVID RESPONSE—the US military’s response to earthquakes in TURKEY. His staff, which was made up primarily of USAF personnel from Incirlick AB, Turkey, coordinated with the Turkish Government and a number of NGOs to provide support to earthquake victims throughout the region. Mr. Owens from OFDA, complimented both the JTF staff and the HAST on successful integration of the relief mission (Owens, 2000: Interview). In an interview, Maj Gen Boots credits his success in working with the host nation, US government agencies, and the IO/NGO community in large part on his experience gained in the coordination processes as the DIRMOBFOR for the Operation SUPPORT HOPE – 2, the second Rwanda crisis, and his experience as an airlift control officer at 21st Air Force.

Given USAF’s unique capability and roles in HA/DR, personnel deployed on either the JTF staff or serving in the humanitarian coordination centers should

have a working knowledge of airlift's capabilities and limitations. Additionally, it is essential that those sent to assist in humanitarian efforts should understand the complexities of relief operations in order to avoid coordination shortfalls (Leshan, 1998:5). The USAF mobility experts can assist and often fill a void resulting from those less skilled or less informed on how to employ airlift effectively and efficiently. The lessons learned from each of these operations stressed two key points. First, training with the IO/NGO community is vital to achieve success in future operations, and second, the environment is unique enough to require specialized training. While none of these case studies clearly states that the role USAF mobility experts played in the US military response can and does contribute to the overall success of any HA/DR operation, it can be gleaned that operations employing mobility experts are sufficiently unique to warrant specialized training for the HA/DR environment.

5.4 A Template for Developing Mobility Experts for HA/DR

The success of the JTF-AR was not a coincidence, but rather it was built on strong leadership, education, training, and preparation by the 3 AF staff. Prior to 1996, USAFE evaluated its NAF and flying wing structure. The draw-down of USAF forces within the European Theater brought into question the necessity to maintain three fully functioning and single focused number air forces (NAF). As a result, Seventeenth Air Force, Sembach AB, Germany, and a number of flying wings were deactivated. During the division of the remaining bases and units, 3AF gained responsibility for USAF forces north of the Alps while 16 AF took responsibility for all forces south. In addition to the division of assets, there was

a parallel and somewhat related division of labor. Third Air Force received responsibility for Sub-Saharan Africa while 16 AF would have the Mediterranean region. Consequently, 16 AF concentrated on the Balkans and would become the "go to war" NAF while 3 AF covered virtually everything up to theater war—in effect an HA/DR NAF. However, 3 AF's mission in Africa has evolved and is not limited to HA/DR only (Sligh, 2001:no-page).

Since 1996, when 3 AF officially took on its new role, it has executed: presidential support (JTF EAGLE VISTA), non-combatant evacuation operations (Zaire, Liberia), disaster relief (ATLAS RESPONSE), movement of African peacekeepers (ASSURED LIFT), and support for Central Command (CENTCOM) after the Kenya and Uganda embassy bombings. Third Air Force has also provided support in the European area when it led JTF-SHINING HOPE, even though it was in 16AF's AOR (Sligh, 2001:Correspondence).

Historically, HA/DR JTFs have been led and staffed by US Army or Marine forces, and USAF mobility experts have served in the AMD and flown fixed wing or rotary assets carrying relief supplies and personnel. Seldom have USAF mobility experts stepped outside their traditional roll in dealing with their blue suit brethren. The designation of 3 AF as the lead agency for HA/DR by USAFE backed by its resounding success in JTF-AR provides a strong case to train mobility experts with the necessary KSAs to serve on the JTF staff and within the humanitarian coordination centers during HA/DR JTFs. For 3 AF, over 700 personnel were deployed for JTF-AR of which over 80 percent were from the USAF (Dreyer, 2001:Interview). They served in positions that included flight

operations, and cargo handling and coordination at all airfields to which supplies transited. They also served as JTF staff members, both forward and rear, and on the air mobility division and the humanitarian coordination centers. The remaining personnel, largely USA CA, made up the CMOCs at Maputo and Beira.

Their success did not arise from coincidence. Rather, 3 AF aggressively organized, trained, and equipped its own staff for its new role. Prior to and during JTF-SHINING HOPE, 3 AF members experienced numerous hurdles and often times found themselves ill-prepared for their responsibilities. Some of these problems included lack of effective planning, inability to mobilize the staff, lack of familiarity of how the humanitarian community operated, and lack of knowledge on running a JTF of this magnitude (Sligh, 2001:no-page).

While classified as a success overall, newly assigned 3 AF Commander, Maj Gen Wehrle was not content with his staff's performance. He established a specific plan to prepare himself and staff for the next HA/DR JTF. His objective: transform 3 AF from a command with a primary warfighting role to one who's mission was to lead HA/DR JTFs and support the warfighting JTF—a task he believed the mobility experts could succeed at accomplishing (Wehrle, 2000: Interview). He began by reorganizing several sections of the headquarters. He created a Plans section (A35) within the Operations Division (A3) and tasked it to draw up "what if" plans for contingency operations in Africa ranging from humanitarian relief to non-combatant evacuations operation (NEO). He established the regional planning flight, whose role was to develop plans for deployments throughout the AOR (Sligh, 2001:no-page).

Most importantly, he named training as a top priority for the staff beginning with designating Exercise TRAILBLAZER 00 as a tool to develop understanding of a JTF for humanitarian operations and familiarization with the humanitarian community. To facilitate this plan he organized the inclusion of UN and IO representatives based in Geneva as well as a number of NGOs to participate in the exercise. “To fill this need, the Warrior Preparation Center at Einseidlerhof, Germany, brought in a council of senior mentors to give their perspectives on humanitarian operations and where the military fit in. These representatives from the IO/NGOs, and political advisors gave Maj Gen Wehrle and his staff a clearer idea of how outside organizations function and what they expected from the military” (Sligh, 2001:no-page).

The changes to TRAILBLAZER 00 were the tip of the iceberg. Third Air Force developed an education program to focus on acquainting the staff with the region where they would most likely deploy—Sub-Saharan Africa. In-house classes were taught on the history, customs, politics, and diseases of the continent as well as on individual countries (Sligh, 2001:no-page)

Following TRAILBLAZER 00, Maj Gen Wehrle and members of his staff went to the UN offices in Geneva and met with members of UNHCR as well as ICRC and other NGOs based in the area. Their intention was to build stronger relations between the two communities and to lay the groundwork for Exercise BRILLIAN LION which was a MEDFLAG exercise in Cameroon scheduled for March 2000. As 3 AF developed plans for the MEDFLAG exercise, they worked integrally with the humanitarian community and the host nation (Sligh, 2001:

Correspondence). Little did they know, their work would prove beneficial in an entirely different environment.

As EUCOM and 3 AF developed plans for JTF-AR and began to phase their role out of MEDFLAG, many of the IO/NGOs they had worked with were doing much the same. As was reported by a number of 3 AF staff personnel deployed to JTF-AR, “when we arrived and walked into the UN-deployed operations area we shook hands with those very IO/NGO players we had been training with for over six months” (O’Brien, 2001:Interview).

As was discussed in the case study, 3 AF officially began its role in JTF-AR when it was tasked to deploy the HAST for EUCOM. Led by 3 AF, the team deployed to Mozambique in mid-February 2000 and served as eyes and ears for EUCOM concerning the necessity to deploy assets to alleviate the suffering. According to Lt Col Dreyer, the HAST closely mirrored that described in Joint publications. He emphasized the team must be tailored for the response and that, when intratheater airlift is involved, it is vital to have a rated USAF mobility expert to serve on the team if not as the head of the team (Dreyer, 2001:Interview).

The HAST team members must understand the culture they are entering. This encompasses an understanding of the host nation government and its populace, the IO/NGO community, the characteristics of the HA/DR environment, and the capabilities of the military forces, which might be needed to deploy in response. Lt Col Dreyer’s experience showed that the host nation and the IO/NGO community were key agencies for the HAST to coordinate with if a

unified effort were to be developed. He stated that it is the team chief's responsibility to focus the team on the CINC's objectives. He goes on to characterize the HA/DR intervention as like coming upon a train wreck—you must prioritize the necessary players (Dreyer, 2001:Interview). The HAST is the lead military agency and must be well trained and familiar with the key players in the HA/DR. Poor guidance by this team could significantly hinder the US military's engagement strategy. Lt Col Dreyer said that the relationships built over the previous 6-months were instrumental for coordination success at JTF-AR (Dreyer, 2001:Interview).

Lt Col Dreyer credits his success to both experience gained in his previous operations as well as his HA/DR training, IO/NGO cooperation conferences, and his engagement with a number of African nations—all of which were done under the umbrella of 3 AF's new mission direction. He served in Operation PROVIDE PROMISE, where he worked with the IO/NGO community to deliver relief supplies to Kurdish refugees, and as the J-3 in Operation SHINING HOPE in Albania. In addition to the direct impact to the IDPs, Lt Col Dreyer was quick to emphasize that, from his repeated trips and conferences concerning support for Mozambique and its neighbors, the political benefits resulting from JTF-AR were significant. He goes on to state that while the US military helped to relieve the devastation in Mozambique, the high level of skill and professionalism of those deployed to the operations had a greater impact than anything we have done in the South African region in the last 10 years. This once standoffish former communist nation has opened up to become very

appreciative of the US and European support for their success (Dreyer, 2001: Interview).

Besides serving on the HAST, 3 AF members played key roles in other areas of the JTF staff. Maj O'Brien served as deputy chief of the CMOC in Maputo. As a member of the international relations staff for 3 AF, Maj O'Brien was responsible for expanding cooperation efforts with the international community to 3 AF operations. He was able to organize training sessions with members from the IO/NGO community to include bringing the UN Civil-Military Co-operation course to 3 AF. As one of the key USAF experts in the CMOC, he felt that the experience and capabilities the USAF brought to the CMOC strengthened the synergy of the JTF with the humanitarian community. While his role in the CMOC was not much different than the civil affairs personnel--ensuring accurate process flow and providing a conduit to the J-3 and the JTF/CC on overall relief operations—he was able to relay information to the IO/NGO community concerning airlift and logistical operations of the USAF. While he was unsure of the level of contribution of the USAF mobility expert in the CMOC, he was certain that without a USAF representative in the CMOC the overall operation would have been handicapped. Like Lt Col Dreyer, he credits his training and experience obtained at 3 AF in helping develop a unity of effort within the humanitarian community and facilitating the JTF's objectives of reaching its exit strategy (O'Brien, 2001: Interview).

Lt Col Neil Smith, Chief of the Air Mobility Division for JTF-AR, provided excellent insight into the key role experienced mobility experts bring to the flow of

humanitarian relief. As the AMD Chief, Lt Col Smith received the validated missions from the joint movement cell (JMC) in the J-4 directoriate, tasked the missions to the flying units, assisted in mission planning, and oversaw execution. The joint operations cell (JOC) located in the J-3 directoriate, the JMC, and the AMD worked hand-in-hand to ensure the requests received from the air coordination cell and the JLOC in Maputo were executable. Besides validation of the mission requirements, the JMC and the JOC worked with the JTF/CC to allocate airlift assets between military and humanitarian requirements. According to Lt Col Smith, following completion of deployment of military forces to Maputo and Beira on the second day of operations, the USAF airlift became solely dedicated to relief efforts. This consequently reduced the balancing of airlift requirements and helped the JTF staff focus more on Maj Gen Wehrle's objective of filling the gaps (N Smith, 2001: Telephone Interview). This contrasted to many of the other complex contingencies the USAF has participated in where the JMC and the JOC dedicated more effort to fulfilling the needs of military operations.

As was noted by the JTF-AR DIRMBOFOR, supply movements between airfields were characterized by problems of late, non-palletized, and hazardous cargo (Gilbert, 2000:no-page). In an effort to help alleviate some of these problems, Lt Col Smith made several recommendations to the JMC and JOC. These included providing the IO/NGO community cargo with cargo nets and pallets as well as positioning mobility personnel at the cargo centers to help instruct the IO/NGOs on the best way to build cargo for air shipment. In his words, the USAF could and did help fill the gaps in the logistics operations and

we did (Smith, 2001:Telephone Interview). The JTF/CC approved deployment of personnel and equipment to Maputo and Beira as well as Pretoria and Durban in South Africa from Hoedspruit AFB to assist in cargo operations. The skills, training, and good will the USAF personnel brought to the IO/NGO community as well as the South African nations by performing this service are immeasurable. Combined training and cooperation in developing the humanitarian community's capability of to conduct HA/DR operations are critical to minimizing the need for US military assistance in the future (Byman et al., 2000:VII).

Lt Col Smith strongly believed that members of the JOC and JMC must be extremely well versed in logistics and airlift operations. His past experience has shown him that the right people in the right positions in the JTF staff ensure efficient and effective allocation of resources and ultimately support the mission objectives. Early in the operation, the JMC consisted of a single ground transportation officer who lacked experience or training on JMC roles and responsibilities during HA/DR. As a result, the JMC duties fell on Lt Col Smith to handle initial coordination and to train the young officer on how to execute his job in to the unique disaster response environment. His recommendation for future operations is to have an experienced member of a Unified Commander J4-JMC to head the deployed JMC to ensure doctrine, training, and procedures, are employed early and correctly.

A brief discussion with Capt Thomas Black, 37 AS, and member of the JTF-AR JOC, revealed a position held by many of the young officers deployed to support operations. He stated the operation was one of the most enlightening

deployments in which he has been involved. However, he added, that had he understood the characteristics and objectives of a JTF established for HA/DR, he felt he could have contributed more to the overall operations. “As the operations progressed the JOC spent more time focusing on the exit strategy and the end state triggers. Coming from a tactics background the focus of how this was to be achieved was completely foreign to me.” (Black, interview, April 2000). This sentiment was expressed during informal discussions by many of the aircrew who deployed to JTF-AR. An additional area Capt Black noted, as a concern was that of airspace control. Mozambique had no radar coverage so most of the initial operations were flown as see-and-avoid or through coordination via the aircraft while airborne. South African radar did provide some coverage of the area around Hoedspruit AFB, but it was not until USAF representative worked with GOM and many of the other agencies providing airlift that airspace plans were developed to organize airborne operations (Black, 2001:Interview). This safety issue was a major concern expressed by the JTF-AR EOG commander in his input to the joint universal lessons learn system run by the Joint Staff at the Pentagon (Cassidy, 2001:Interview). For the USAF, airspace coordination is a major concern. Whenever airlift—both intertheater and intratheater—is involved mobility experts must be intricately involved in resolving airspace issues or potential serious flight mishaps may ensue. While it would be impractical to train everyone who deploys to conduct HA/DR to the level of 3 AF personnel, training those individuals in key staff positions and those who engage with the many

humanitarian aid agencies, host nation governments, and foreign militaries would prove extremely beneficial.

5.5 Conclusion

Major General Nick Letoluo Leshan, Commander, Kenya Air Force, in his study [the Role of Air Power in Humanitarian Operations](#), offers an exceptional insight into effective airlift integration during humanitarian response. While his article is short, it drives straight to the heart of why this paper has been developed—the need for trained mobility experts to effectively coordinate and integrate airlift movement into HA/DR operations. He had this to say about HA/DR response efforts:

When the call for help is responded to, relief is often shipped into the country affected in such overwhelming volume that another problem is created by insufficiencies in manpower storage facilities, security, means of transporting relief supplies to the affected people or means of distributing relief supplies at the distribution centers. The resulting chaotic situation often occurs because of lack of established coordinating authority to manage distribution and control the relief supplies. Unfortunately such confusion leads to very expensive, whether fiscally or in terms of loss of life, and often-useless operations. Far too often, surface and air transportation are sent to destinations that are neither safe nor secure, carrying food supplies that might or might not be adequate for the recipients. From this point on crisis usually takes over with the country being assisted issuing further calls for transportation to help alleviate the failings in the system (Leshan, 1998:3).

Airlift, in and of itself, cannot solve this misfortune, but effective coordination between the gamut of players involved in relieving human suffering may mitigate the effects. Such an operation would require thorough planning and coordination under centralized command with participation of all contributing agencies—to include the military, host nation government, and the many

international, non-government, and private relief organizations. It must include members experienced at airlift operations and humanitarian coordination unique to the response environment (Leshan, 1998:3). The ability to solve this dilemma is one the USAF mobility experts are ideally trained to perform.

A better relief agency-military partnership has tremendous potential when anticipating a HA/DR—allowing all partners to respond to the crises more efficiently and effectively (Byman et al., 2000:57). However, in the time of growing demands and shrinking budgets, how can the USAF mobility units better prepare themselves to meet its expanding obligations? The most effective method of providing the right mix of resources in as effective and efficient operation as possible is to provide those mobility experts that will work in an HA/DR with KSAs adapted for the environment they will encounter. Whatever the scale of future operations, the USAF will likely need to worry about training people to work with specialized equipment, infrastructure, and institutional arrangements to support HA/DR (Lembert and Wolf, 1992: 24).

Chapter 6.0 Development of KSAs for HA/DR

During major operations, strongly motivated people in both the military and IO/NGO camps usually find ways to set aside cultural differences and work together for the humanitarian effort. However, valuable time is lost inventing and reinventing the coordination process (Byman et al., 2000:101). Through training the right experts with the correct skills, the military can shrink this divide before operations begin and thus save valuable time, resources, and lives. Numerous resources exist for US military engagements in humanitarian crises. However, very little is written on the KSAs military experts must develop to work within the HA/DR environment. This chapter will examine those KSAs which USAF mobility experts should develop for HA/DR operations. The KSAs for USAF mobility experts include:

1. Understanding the IO/NGO culture and the humanitarian environment.
2. Understanding the unique aspects of a JTF in a HA/DR environment.
3. Understanding the history, customs, politics, culture, and economics of the region to which they may deploy.
4. Understanding that the core competency of rapid global mobility is uniquely different for HA/DR compared to warfighting

This chapter will discuss these four points and support the argument that they are unique and that the USAF should provide its mobility experts training in these areas prior to future operations. Before discussing these four areas, this section offers a brief look at why these KSAs are unique to the HA/DR environment will be addressed.

6.1 A Case for the Unique KSAs

Some have proposed that the knowledge, skills, and abilities that USAF mobility experts possess are transferable across the full spectrum of conflict. If the USAF develops KSAs for its most difficult mission, warfighting, than those KSAs can be readily adapted through no additional training to lesser conflicts to include HA/DR. According to Lt Col Tom Baltazar, former USA Civil Affairs Battalion Commander and currently an action officer in the Office of the Deputy Assistant Secretary of Defense for Peacekeeping and Humanitarian Affairs, the KSAs necessary to effectively operate in this unique environment are not transferable from our war time mission. They are unique to the field and thus must be specifically trained for (Baltazar, 2000:Interview).

Relying on the premise that the skills necessary in war are transferable to HA/DR would call to question the resource expended by the USA and Special Forces Command on a specially trained civil affairs cadre. This would also call into question the training in MOOTW and HA/DR familiarization being performed by the USA at the Joint Readiness Training Center and by the USAF at the Air Mobility Warfare Center's, Phoenix Readiness program. Within both training programs, significant time is spent familiarizing soldiers and airman with civil-military operations. While valuable, this training at the AMWC falls short of preparing the USAF mobility experts for the environment they may operate in.

One of the differences in performing in HA/DR environments is the difficulty translating military capabilities into humanitarian needs and civilian tools. How can we translate a requirement of clean drinking water into a Time

Phase Force Deployment Data? (Kunder, 2001:Interview). According to Mr. Cuny, “relief operations are not a logistics exercise to get goods to people—it is a process to accelerate recovery” (Cuny, 1999:XIII). He goes on to criticize relief efforts that view their work as a tactical or logistics problem. For the military, logistics requirements to support disaster relief operations depends upon the specific situation and the requirements identified by OFDA—not the military as during war (Byman et al., 2000:21).

The USAF mobility experts must build on their current abilities to improve coordination of the relief flow during HA/DR crises. In effect, they must help develop a logistics capability to help manage the flow of relief—not just goods (Byman et al., 2000:142). To achieve this end, training must extend beyond logistics and must include understanding the culture of the humanitarian environment before one can execute the mission. If the USAF is to think of its role as strictly a provider of logistical support, then current training may suffice for operations in an HA/DR environment. However, if the USAF is to embrace the notion they will become more readily involved in areas outside the AMD, which Chapter Five presented of, then the USAF must examine the KSAs necessary for this increased role.

Major Lindsey E. Arnold, USA, draws two conclusions relating to this discussion in his thesis Cooperation and Conflict: The Interaction of US Military Forces and Nongovernmental Organizations in Military Operations Of Than War. The first is that military organizations view and deal with IO/NGOs as an external environment factor, and the NGOs view and deal with the military as an external

environmental factor. He puts this in the context of the military's ability to internalize the IO/NGO community when it comes to command and control. Since neither the IO/NGO community nor the military is unwilling to subjugate their operations to the other, than the two parties must find ways to meet and develop a unified operational understanding (Arnold, 1996:86). This can be done either on the 'dance floor' as was the case in Somalia, or in preparation for operations through training (Seiple, 1995:96). For the USAF mobility expert, little training focuses on how to adequately deal with the external environment—rather training is focused on effective cargo movement through a military controlled structure. Since the focus of USAF operations in an HA/DR operation is to support the international community through effective and efficient airlift, the USAF must comprehend how the external environment influences this goal. For the context of this discussion, the term humanitarian environment can replace the term external environment.

The second point Major Arnold makes is that there will always be friction in the interaction between the IO/NGOs and the military. There are two reasons. The first results from the difference in the basic unstated assumption that the military believes control is good, and the IO/NGOs belief that organizational independence is vital. The second is that the ultimate values and ends of the military and the IO/NGOs lie in different places (Arnold, 1996:98). He continues by saying that no organizational adjustments will be sufficient to overcome these issues, and thus we must expect this conflict to be inherent in any operation (Arnold, 1996:91). If in fact Major Arnold is correct about these two points, then

the best the military can hope for is mutual understanding. Achieving a mutual understanding can only be gained through communications and trust—something thus far only education and training can resolve (Tomlinson, 1999:44). The following section will address this cultural divide more specifically.

6.2 KSAs for the Mobility Experts

The Cultural Divide Between HA/DR Players

The differences between the missions of the military and aid agencies cannot be overstressed (Tomlinson; 2000:17). Given the revolution in HA/DR engagement by the USAF, airman must become more familiar with the characteristics HA/DR environment. Working well with the IO/NGO community is essential for the effective provision of relief (JP 3-08, 1996:III-25). Because military support for humanitarian assistance will be unabated in the coming decades, the USAF must know and work with a wide range of actors. These actors vary tremendously in their capabilities, size, and attitudes with considerable implications for future USAF operations and for the success of the overall relief mission (Byman et al., 2000:59). As addressed in the literature review, a great deal has been written on the divide between the military and humanitarian aid community cultures. This author has no intention of reiterating the literature that has been written in this area—the scope of this paper could not match the excellent work previously accomplished. However, a few key points will be made to highlight why this area is vital for training for mobility experts.

Two fundamental differences between military organizations and civilian aid agencies exist—namely culture and mission (Tomlinson, 1999:18).

Successful integration of resources requires understanding these differences (Byman et al., 2000:64). While the military has increased its participation in operations, there has also been tremendous growth in the humanitarian community. The sheer scale of the IO/NGO community brings power and influence to any operation. NGO numbers have increased five-fold in the past 10 years (Tomlinson, 1999:15). In 2000, the number of NGO's operating worldwide exceeded 26,000, with the number topping several million when domestic aid agencies are included (Byman et al., 2000:64).

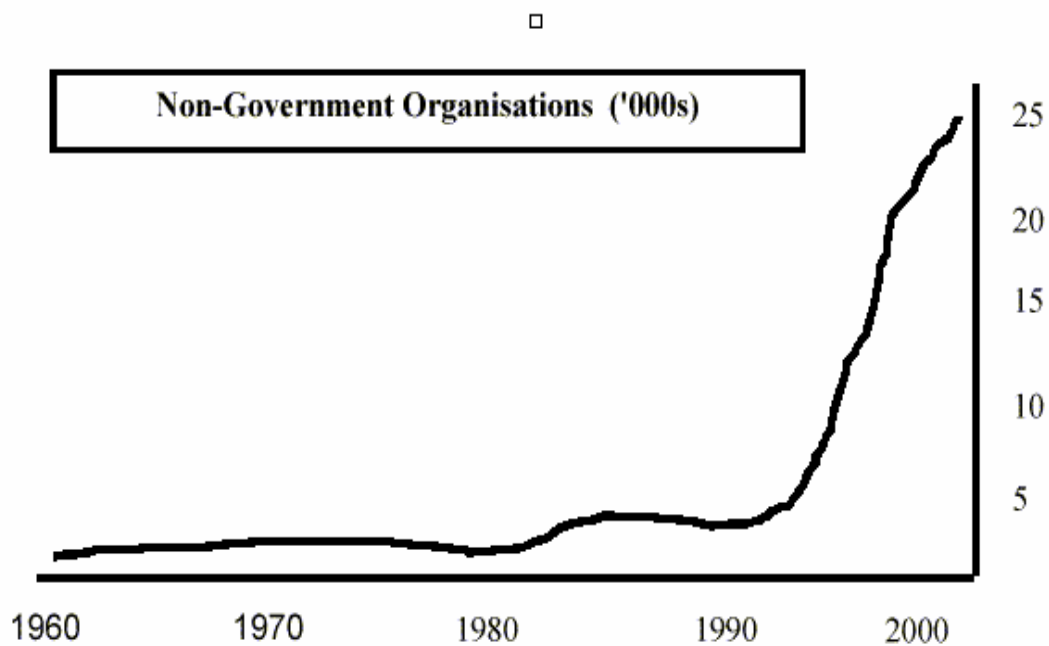


Figure 6-1: Swarming of NGOs

(Tomlinson, 2000:14)

Of special note, the flourishing of the NGO community coincides with the dissolving of the Cold War hostilities and the control the two super-powers held over Third World national governments. This change may explain how the

political landscape affects humanitarian engagement (Figure 6-1). The tremendous growth in the IO/NGO community sized also brings financial clout. Collectively, the NGO community spends over \$7 billion a year, but less than a dozen of the NGOs are responsible for over half of those aid dollars (Tomlinson 2000: 15).

More and more donor governments are choosing to channel aid bilaterally through the major NGOs instead of through multilateral UN agencies—further enhancing the power of the NGO community on the world stage (Tomlinson, 2000:15). The U.S government is no exception. OFDA currently has over 350 IO/NGOs registered with its organization. It provided over a quarter of a billion dollars in 1999 to these organizations as well to foreign governments through the US Embassy to respond to HA/DR (OFDA, 1999:n-page). OFDA's financial expenditures are often transparent to the American public as well as to many other US government departments.

Many military officials lack an understanding of the distinct charters and doctrines of the IO/NGO community. In turn, aid organizations criticize the military for not understanding their hierarchies. As one aid official noted in an interview with a study RAND was conducting, "The military should accord the head of major NGOs and IOs the respect normally granted to a general officer" (Byman et al., 2000:114). Table 5-1 is a synthesis of the authors research and helps identify the cultural differences between the two communities. While some could find IO/NGO or military units who do not fit specifically into the table, on the aggregate the differences hold true between the two communities

	United Nations	IO/NGO	Military
Interagency Cooperation	Consensus (1)	Consensus (2)	Coordination (2)
Relationship in HA/DR operations	Hierarchy between lead agencies	Equal among many (3)	Hierarchy between organizations (3)
Organizational structure	Formal chain of command (4)	No formal chain of command—diffused	Formal chain of command
Affiliation	Politically aligned	Neutral	Politically aligned
Roles and mission in humanitarian environment	Primary (2)	Primary (2)	Ancillary (2)
Security concern	Low but growing	Low but growing (1)	Very High (1)
Experience level in HA/DR	Extremely High (4)	Extremely High (1)	Very limited
View of field operations	Across the time spectrum depending on lead agency (4)	Long term (1)	Short term (1)
Field workers reporting chain	Through formal chain (1)	Autonomous—self reliant, independent from HQ (1)	Through formal chain
Breadth of organizations	Humanitarian (4) Human Rights Civil-societal Conflict Resolution Etc.	Humanitarian (UN) Human Rights Civil-societal Conflict Resolution	Combat forces Combat support
Preplanning	Medium	Little to none (1)	Deliberate planning (1)
Reaction Capability	Hampered by diplomatic agendas	Very Rapid (1)	Hampered by Political/diplomatic coordination
Financial Support	Deep Pockets	Limited budgets—contingent heavily on media (1)	Deep Pockets (1)
Concern with Media	A necessity to show UN resolve	Absolutely critical for continued funding	A necessity to show US resolve
Distribution of Relief	Often politically based (4)	By need (1)	Politically driven
Willingness to share information	Highly Transparent	Highly Transparent (1)	Limited: Utilization of classified information (1)
Mission Objective	From emergency relief -nation building	Creating self-sustainment (1)	Return to status quo (1)

Table 6-1: Evaluating the Cultural Divide,

[(1) Byman, 2000 (2) Hinson, 1997 (3) Arnold, 1996 (4) UN Tour, 2001]

In addition to the apparent cultural differences between the humanitarian agencies and the military, the environment in which the USAF mobility experts may find themselves operating in poses unique concerns. The first is the lack of awareness of which organizations are working within an area. No requirement for the IO/NGO community to register their operations exists within any country (Byman et al., 2000:115). Normally the US embassy, or in recent years the theater commanders, have tracked the larger IO/NGOs operating in region.

The unwillingness of the IO/NGO to share information with the military, as well as the increased level of requirements and reduced manning levels has made it difficult for both the U.S embassy and the military to accurately track these agencies. This lack of knowledge has cost the military. According to Maj Gen Boots, DIRMOBFOR for what became known as Rwanda-2;

The US military developed plans and deployed mobility forces in late 1996 throughout the region (Kenya, Uganda, Burundi, and Zaire) in anticipation of assisting Rwandan refugees crossing the border from Burundi. The U.S response was based on media reports, the “CNN effect” of starving refugees. It turns out that the refugees crossing the borders had been in UN refugee camps and were in relatively good shape. The stories the media were displaying were isolated incidents. Had we had made contact with many of the IO/NGOs in the area, the US military may have known the true health status of the refugees and prevented an exceptional outlay of valuable military resources (Boots, 2001:Interview).

Similar findings were drawn from the JTF-AGUILA. The Institute for Defense Analysis performed a study on the US military operation and came up with two findings relevant to this issue.

The U.S. military forces, whether at geographic combat command headquarters or in the field had little knowledge of the UN personnel, support systems or

coordination mechanism operating in the affected countries during the Mitch relief effort (Lidy et al., 2001:B-64).

Contact between the U.S. military forces and non-government organizations operating in the Hurricane Mitch AO ranged from close cooperation to absence of contact, but was mainly characterized by sporadic, non-systematic interaction. Many DoD personnel providing assistance in Central America evinced limited knowledge of the nature and scope of NGO operations. (Lidy et al, 2001:B-68)

The reason for lack of knowledge is institutional. Although many officers have worked with relief organizations over the past decade, little effort has been made to retain this knowledge. In the USAF in particular, there exists no institutional responsibility for tracking and ensuring liaison activities with IO/NGOs. The IO/NGOs are important, visible players with significant influence on the world scene and planners should coordinate with them during planning and execution of US military operation to ensure valuable resources are adequately used (Byman et al., 2000:115). In a discussion with Capt Tom Mauchly (Now Maj) concerning his role as the TALCE commander in Goma, Zaire, during Operation SUPPORT HOPE, he stated that he was unaware the UNHCR was running an air coordination cell for airlift operations until two days after mission operators began. He adds that TALCE operations have historically operated in a bubble focused solely on US Military operations. Humanitarian operations must shed this stereo type of operations focusing solely on the military and gain a stronger understanding of all the players in a HA/DR operation. For Maj Mauchly, "field operations with the IO/NGO community has been trial by fire" (Mauchly, 2000:Interview). The US military has identified this need as shown by EUCOM's and PACOM's increased coordination with

important IO/NGO agencies in their regions. Third Air Force, as another example, has bridged these gaps by working contacts with the IO/NGO community operating in African and performing field and computer exercises with them.

Over recent years, however, there have been a number of issues that have narrowed this cultural divide—not by design, but by circumstance. While the US military has had to participate with the IO/NGO community in the last decade, the US military has also witnessed a growing concern by the IO/NGO community for the safety of its members. More and more members of the humanitarian community have become targets of rebel groups, unofficial government organizations, and even of host nation governments. After recently losing personnel in Chechnya, Sierra Leone, and other war zones, the ICRC, which is traditionally one of the humanitarian organizations most aloof from the military, has become painfully aware of security need for that the military can provide (Byman et al., 2000:89). Increasingly, the international community has turned to the military to provide security to its members. This requires the military to make a great investment in understanding the demands of these organizations.

Not only has the IO/NGO community grown to accept the role of the military in HA/DR, they have realized the benefits of strengthening their own understanding of how the military operates. This maturing relationship between the military and IO/NGO community is demonstrated by the IO/NGO community hiring former military members to work in their organizations. Accordingly Mr.

Cobb, a former Army Civil Affairs officer, stated that a decade ago the IO/NGO communities had virtually no members with military experience. Today, it would not be uncommon to run into former military colleagues working for one of the hundreds of IO/NGO organizations handling a humanitarian or disaster response operation (Cobb, 2001:Interview). This link has enabled the two communities, who once looked at each other with contempt, to understand each organization's objectives and to work together to achieve the relief goals for those devastated by the crises.

Intervention in HA/DR is not only complex operationally, but is also complex organizationally. It involves a wide range of different and often competing or diverging actors including host countries, donor countries, and international, regional and non-governmental organizations (Byman, 2000:XV). The NGOs, like the military, are value-based institutions. Unlike the military, they are not statutory in nature. Their organizational culture emphasizes the potential of the human community to help each other on a voluntary basis. They are often religiously based, but whether religious or nonreligious, they all share the basic underlying assumption that altruism is a power motivating force. Finally, they believe that helping others is what life is all about and attempt to do so in incredibly difficult circumstances (Arnold, 1996:65). The goal then is to limit the negative impact the differing organizational methodologies, stereotypes, or biases can create in the HA/DR crisis. The growth of USAF operations in the HA/DR environment, and the changing character of the IO/NGO community indicate with certainty that the USAF will increase its partnership with the IO/NGO community.

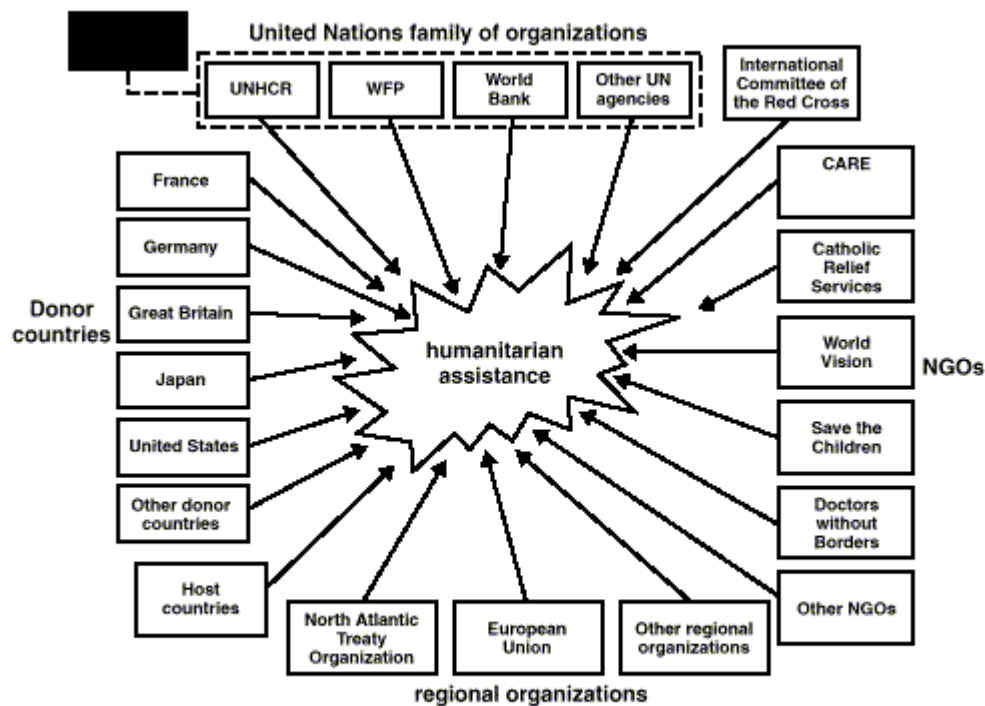
Given this reality, USAF mobility experts must develop the KSA necessary to effectively integrate airlift assets into a HA/DR operation.

In the past, many military officers viewed IO/NGO employees as young anti-military, self-righteous, incompetent, and unappreciative of security needs (Byman; 2002:118). While there are isolated cases of this still being the case, both the military and the IO/NGO community are making strides to understand the professionalism, knowledge, skills, and abilities each bring to a HA/DR crises. If the military and the NGO are willing to implement procedural changes and devote resources to enhanced cooperation, overall performance during HA/DR, operations will improve (Byman et al., 2000:119).

Uniqueness of a HA/DR JTF

The second of the four KSAs requires that USAF mobility experts must better understand the differences between a JTF established for a combat operation and one established for an HA/DR operation. The unique role the military plays in HA/DR requires changes to the role and focus under which a JTF commander and his staff must operate. Accordingly, the JTF commander must foster unity of effort through closer cooperation with the IO/NGO community. The military brings security and an unmatched logistics and transportation capability. IO/NGOs brings strong organizational commitments and unequaled regional awareness. Through proper command and organizational techniques, the JTF can focus and generate synergy for the relief operations (Arnold, 1996:25-26).

Upon taking command of 3 AF, Maj Gen Wehrle set out to prepare his command for its role and mission as USAFE's lead agency for operations short of combat. Until this time, 3 AF members had not received any formal training to run a HA/DR JTF. Working with the other services during the Operation SHINING HOPE convinced some Third Air Force members that they were behind in the JTF game. Gen. Wehrle's solution to this knowledge gap in his staff, if not himself, was to transform the Exercise TRAILBLAZER 00 into an academic course in running a JTF and working with other military and IO/NGO organizations unique to the HA/DR environment (Sligh, 2000:no-page).



NOTE: OCHA = Office for the Coordination of Humanitarian Affairs; UNHCR = United Nations High Commissioner for Refugees; WFP = World Food Programme.

Figure 6-0-2: The Humanitarian Environment,
Byman, 2000:82

Why did Maj Gen Wehrle focus his staff on training of a JTF? The simple reason is that a JTF operation for HA/DR is unique enough to warrant this attention.

Figure 6-2 illustrates how vast the number of organizations the JTF must coordinate with during a relief operation—no simple task.

The relief structure in which the JTF will operate must be understood. As previously noted, the JTF can fall into a HA/DR led by the host nation, the UN, an alliance or coalition of forces, or by the JTF functioning as a unilateral operation. In each one of these cases, the coordination structure for the JTF must be infused into the humanitarian effort, or operational synergy will likely suffer. Because the structures often vary considerably from crisis to crisis, establishing interagency relationships during operations will be difficult, but it must be undertaken (Byman et al., 2000:91-97). Joint doctrine briefly addresses this opting to present structural diagrams based on how the US responds, not on the structure of the humanitarian response. For this reason, coordination efforts must be performed prior to the actual crises.

Further complicating the lack of structure within the environment is the lack of structure within the IO and NGO community. While the UN has wiring diagrams depicting the organizational chain between its internal agencies, the remainder of the IO and the NGO community does not have any lines of control or coordination (Kunder, 2001:Interview). For each NGO, the decision process will either work through its own headquarters in some other location or be made unilaterally by the field worker. There appears to be no rhyme or reason to this

process. Additionally, there may be little or no coordination between the many aid agencies present during a crisis—thus creating a duplication of effort.

Depending on the nature of the crises, different UN agencies will take the lead. For any crises involving refugees, the UN High Commission for Refugees (UNHCR) will take the lead. For natural or man-made disasters, OCHA will task one of its many agencies to take the lead (McGoldrick, 2001:Interview).

Compounding this UN policy are those crises which both refugees and natural disasters are present. The international response to the famine in Somalia is one example of a situation where famine issues were addressed by the UN Department of Humanitarian Assistance (UNDHA), the predecessor of OCHA, and IDPs were handled by UNHCR. According to Thomas Weiss, research professor and Director of Global Security Program:

So far the complex UN system has not managed to act as a coordinator and provider of “collective identity” to new kinds of humanitarian involvement. The result has been that the UN has engaged in conflicts as a split organization without any coordination and cooperation between the various institutional components thus resulting in “organizational overkill.” (IAPTC, 1998:no-page)

As a general rule, HA/DR missions experienced more dissimilar than similar issues. The US responses to Hurricanes George and Mitch made this evidently clear. Both of these hurricanes struck the Caribbean and Latin America, but the level of response from the IO/NGO and US government, the infrastructure with which they operated, the structure of the JTF for each operation, and the lead civilian agency varied significantly between the two crises (Voorhees, 2001:Interview).

A second area in examining the difference between JTFs established for combat and HA/DR lies in the objectives each works to obtain. FM 100-23 and the Joint Task force Commander's Handbook for Peace Operations provide a clear distinction between warfighting and humanitarian JTFs. As with the culture divide between the military and civilian, the author does not intend to reiterate what this literature says. However, there are some key aspects particular to JTF for HA/DR applicable at the tactical level worth mentioning. For a combat operation, a JTF structure is established to overwhelm the military's opponent (AFDD 2-3, 2001:1). For a HA/DR, the objective is to provide assistance after a natural or man-made disaster and to stem loss of life and facilitate recovery. The JTFs operating in an HA/DR crisis are there to support the host nation and international community and will operate by direction of the lead agency, normally USAID or OFDA (FM 100-23-1, 1994:no-page). This brings to the light the first significant difference—resolving the question of the “end-state” and how it can be achieved. According to Field Manual 100-23-2, “the HA mission should produce a desired end state collaborated by strategic-level political, military, and humanitarian (response triad) participants. Whenever possible, the desired end state should be known before commitment of US forces. However, this may not be possible. If the desired end-state is not known and US forces have deployed, the unified commander may be required to formulate one.” (FM 100-23-2, 1994:no-page)

The identification of the end-state triggers played a significant role in how Gen Wehrle and his staff planned and executed day-to-day operations. For JTF-

AR, the end-state triggers were clearly defined levels of operations: greater civilian control of the coordination/information processes, lines of communications established to allow commercial movement of supplies to the IDPs, and reduced demand for US military support. When civil capabilities exceeded military requirements, JTF-AR began the redeployment of forces (Wehrle, 2000:Interview).

JTF-AR's definition of clear and distinct end-state triggers was influenced by the failure to do so for the Bosnia-Herzegovina and Hurricane Mitch operations. For Bosnia-Herzegovina the end-state was defined as time—one year (Hinson, 1997:24). For Hurricane Mitch it was defined as a dollar value. Once expenditures exceeded \$100 million, operations were to be suspended (Cobb, 2001:Interview). In both cases the end-state were defined and obtainable, but they failed to achieve the strategic objectives the US had established for the operation. Consequently, both end-states were excessively exceeded. While the NCA defines the end-state and planners develop the triggers, individuals at the tactical level are the ones who work to achieve them. If they are unfamiliar with what they are or are not given the necessary resources to achieve them, it will be certain the departure from the crisis will be extended (Sligh, 2001:no-page).

Tied closely to end-state triggers are two key points. The first is that the military does not set the agenda within the HA/DR environment. Rather, the humanitarian community sets the priorities and the military executes the mission (Dreyer, 2001:Interview). Second, the long-term commitment of some of the

IO/NGOs in a region may lead to substantial differences in how accomplishment of the relief effort is defined by different players in the same HA/DR (Arnold, 1996:24).

The third and final difference in the HA/DR JTF is the inclusive role the coordination centers play in the overall accomplishment of the mission. The CMOC is an ad hoc organization, normally established by the geographic combatant commander or subordinated joint force command to assist in the coordination of activities of engaged military forces and other US Government agencies, IO/NGOs, host nation agencies and other foreign military forces not within a combined operation. The organization of the CMOC is theater-and mission-dependent-flexible in size and composition. A commander at any echelon may establish a CMOC to facilitate coordination with other agencies, departments, organizations and the host nation (JP 3-07, 1995:III-116). As mentioned in the literature review, joint publications and DTIC documents address the CMOC quite extensively. Joint Pub 3-57 says a CMOC acts as the JTF commander's nerve center for civil military operations and coordination with other non-DoD agencies (JP 3-57, 2001:IV-4). According to Maj Gen Wehrle, the CMOC was the glue that held the NGOs together in Mozambique. Establishment of the CMOC was one of the top priorities for JTF-AR (Wehrle, 2000:Interview). Given its position as the center for coordination and its successful role in operations dating back to Operation PROVIDE COMFORT, it is surprising the significance the CMOC to a HA/DR crisis needs to be addressed further. However IDA sighted in their Hurricane Mitch report

CN-5: The Hurricane Mitch response reflected a substantial breakdown in the application of the DoD doctrine on Civil-Military Operations Centers (CMOC). Formal structures of coordination between U.S military forces and non-USG civilian relief agencies did not, by and large, achieve significant synergy (Lidy, and others, 2001:B-70).

The significance to this finding demonstrates that the CMOC must be the center for the coordination of the JTF's operation. Tied closely to the CMOC are the LOC and the ACC. During JTF-AR, USAF mobility experts worked with the LOC and composed the ACC. In future operations, USAF mobility experts may find themselves working in or with the CMOC as well as the LOC and ACC as was the case when Exercise BALAKATAN in the Philippines turned to a humanitarian crisis. In this situation, airman from USAF Special Operations Group, Kadena AB, Japan, served in the CMOC and as well as other key JTF positions during US military response (Cobb, 2001:Interview). For those working in the areas such as the AMD or on the flightline, or in the any other capacity with the IO/NGO community, they must understand that the CMOC exists as a source to facilitate operations for both the JTF and the international community. Successful work in the CMOC goes beyond coordination with NGOs, UN, and foreign militaries, and it must include some level of understanding of emergency response and relief operations (Cuny, 1999:89). According to Maj Seiple to think of the CMOC as another place for incompetent, non-warfighters is a fundamental mistake. If for no other reason than self-interest, the CMOC must become a priority because it represents the military's best chance to design and control its own exit strategy (Seiple, 1995:206). The size of the CMOC, large vs. small, will

determine the level at which USAF mobility experts will be integrated. (Kunder, 2001:Interview).

Understanding the HA/DR Region

The third KSA on which the USAF mobility force should focus is understanding the region in which HA/DR operations may be executed. After being tasked with support of non-combat operations in Africa, 3 AF began by studying the African continent. They conduct monthly classes on culture, environment, and characteristics of the indigenous population (Sligh, 2001:no-page). Lt Col Dreyer believes this knowledge is key to applying the right resources to a mission.

Quite often foreign governments are quick to send tents and sophisticated water purification and medical systems. In an area like Mozambique, tents are perceived by many as permanent structure (a considerable step up from grass and mud huts), but it must be remembered the US military's objective is to return the area to the status quo, not nation build. For the U.S. in particular, sending plastic sheeting which deteriorate after a period of time rather than tents is a hard pill to swallow.(Dreyer, 2001:interview)

Members of PACOM's and the US Army Civil Affairs personnel cadre cite knowledge of the region as critical to determining synergy at all levels of the operation. In many cases the culture in which the military is tasked to operate is very different than it's own. Whether the military agrees with the other culture is not important at the time of the crisis. What is important is how the military responds. For many cultures, women effectively are second class citizens, which means that relief support must be worked through the men and not the women. This has made operations extremely difficult in many parts of Africa since many

of those most in need of support are the women and children. Mr. Kunder relates a similar story from his time working in the field in Mogadishu.

While working in coordination center, I was approached by a US Army company commander who had said his troops were doing a little rationing of their—meals ready to eat (MREs)—and providing the extra food to the kids at the fence of the compound. While this was a nice gesture, I felt compelled to tell him that its not the kids that come to the fence we need to worry about. They have enough food. It's the ones not at the fence who are suffering (Kunder, 2001:Interview).

Mr. Cuny notes that quite often food availability in a country is not an issue, it is getting it to the people who need it. In Somalia, the city market in Mogadishu was thriving. Basic necessities were available for purchase. The problem arises from the fact that those in need do not have the money to purchase the food. Mr. Cuny terms this type of famine as resulting from purchasing power, which is different than a famine resulting from lack of food. Interesting enough he states that the former is the most common occurrence (Cuny, 1999:1).

These three examples provide only a cursory glance of the many complicated issues facing the international community as it responds to HA/DR. Many of the humanitarian agencies, both local and international, can teach the military a great deal about the cultural divide between the military and the indigenous population, but the military must be interested in learning. By understanding the culture, USAF mobility experts could better work to allocate scarce resources to the appropriate problem as confronted by the JTF commander and the international community.

Development of Field Experience

The final KSA—understanding that the core competency of rapid global mobility is uniquely different for HA/DR—initial appears to contradict USAF mobility expert's primary wartime capability, especially in light of the expeditionary aerospace force (EAF). As our previous chapters indicate, the IO/NGO cultural and the humanitarian environment shows that the KSA's applicable to HA/DR are developed specifically for these operations, but these KSAs can also be applied during wartime operations. The fundamental KSAs that USAF mobility experts are trained in—such as airlift, aerial port, and command and control—provide the foundation for any type of mobility operations, but only through a greater understanding of the concepts and tenets, organizational structure, and leadership of the operation can these KSAs be more effectively applied in HA/DR crises (Voorhees, 2001:Interview).

This said, one of the key responses to the survey and follow-up interviews is that mobility experts must bring an in depth knowledge of mobility skills to the relief effort. These include command, control, and communications (C3), deployed airlift operations—both ground and air—and understanding of the issues associated in force protection (Boots, 2001:Interview). AFDD 2 Organization and Employment and AFDD 2-6, Air Mobility Operations, address how air mobility operations function in a deployed environment. Coordination of airlift operations can be conducted using sophisticated information systems or relying on the utilization of cell phones, land-lines, and faxes for information transfer and the use of electronic data bases to schedule and track airlift

missions. The IO/NGO community, on the other hand, works using paper and grease boards and seldom has a consolidated airlift flow plan (in military terms, an air tasking order). For operations where intratheater airlift is heavily involved, USAF mobility experts must be able to readily integrate into the current structure or when no organization has been established, diplomatically introduce an air coordination program without appearing to be the 'big dog' that Lt Gen Wehrle often describes.

Up to this point, the focus of discussion for training has been on those USAF mobility experts who work in the coordination process. Two additional areas in which USAF mobility experts come in contact with the IO/NGO community are the aircrews who upload, download, and fly relief supplies and the deployed air mobility support elements such as AMC's TALCEs, or the USAFE's CRG. During JTF-AR, the ingenuity of the aircrews, TALCE, and CRG in dealing with ramp saturation, cargo handling issues with the relief organizations, and host nation requirements ensured the relief supplies continued to flow (Sligh, 2001,no-page). According to Major Tom Mauchly, airfield operations take on a new dimension when working with foreign militaries, IO/NGOs, and the local populations. The arrival of unexpected aircraft and demands from all the organizations working out of a remote, uncontrolled airfield, require all parties to develop close working relationships and mutual understandings of roles and responsibilities to ensure operations continue (Mauchly, 2000:presentation).

Another example confirms that the unique KSAs must be developed to support the international humanitarian community. Capt Lee and his team at

JTF-BRAVO handled over 50 different types of aircraft from 21 different Countries, most of which have never been worked before by his team. With these diverse aircraft came the issues of incompatible ground handling equipment, fuel requirements, maintenance problems, and lack of standardization between air carriers to name just a few (Lee, 2001:Interview). While it is impossible to prepare mobility experts to handle every aspect of contingency, training to the most to those recurring elements--such as a variety of foreign aircraft and coordination processes host/ foreign nations and IO/NGOs who operate them—will accelerate the time to reach effective and efficient airlift operations in the humanitarian environment.

While many host nations and the IO/NGO community have been impressed with USAF mobility expert's ability to deploy and operate, its their strength to adapt and meet the challenges presented by HA/DR environment which gain many acolytes (Voorhees, 2001:Interview). Even with their high marks, a closer coordination process with the HA/DR must be considered. Issues such as ramp saturation, load planning, disorganized cargo staging and dispersion, and no central airlift coordination process are compounded by many of the cultural issues discussed in the previous paragraphs. According to Maj Gen Boots, while we have developed many of these skills at permanent or semi-permanent enroute facilities, we must place a greater value on deployment of mobility experts for bare base operations with HA/DR in mind. This will pay dividends not only for HA/DR operations but will compliment the AEF we are working to foster (Boots, 2001:Interview).

6.3 Conclusion

This chapter has outlined four KSA's applicable to USAF mobility experts to enhance the JTF's capabilities during HA/DR crisis. At a minimum the USAF should ensure that its key personnel are familiar with organizations relevant to relief operations and how they operate (Byman et al., 2000:142). Mr. Elmquist, Chief of the Military Civil Defense Unit, OCHA, stated in a recent conference that, in order to enhance cooperation between the US military and the multitude of humanitarian organizations who operating in the HA/DR environment, the two communities must develop five key areas of understanding. Of these five, four pertain directly to the USAF mobility experts: mutual respect between the communities, knowledge of each other's capabilities, understanding of the cultural difference between the communities, and coordination of structures and facilities (IAPTC, 1998:no-page). Through training, the USAF mobility experts will develop these much needed KSAs. The concluding chapter of this research will address briefly where some of this training can be gained, make recommendations on who should get this training, and present possible changes to our USAF and military structure to support future HA/DR engagements.

Chapter 7.0 Conclusion

Chapter one presented two objectives for this research paper. The first objective is to provide the joint community a greater understanding of the contributions that USAF mobility experts make to HA/DR operation, and the second is to persuade the USAF to provide its mobility experts with the needed KSAs to effectively and efficiently integrate USAF airlift assets into HA/DR operations. Chapters four and five presented the reader with case studies of the expanded participation of USAF mobility experts in HA/DR operations. In each of these case studies, USAF mobility experts became force multipliers for the JTFs. The increased role of intratheater airlift, the KSAs that USAF mobility experts bring to the JTF staff and humanitarian coordination centers, and the vital link that TALCE and CRG elements contribute to a smoother relief flow provides proof of the exceptional contributions the USAF makes in obtaining synergy of operations, unity of effort, and end-state triggers for the JTF.

The first objective directly relates to the second objective. As the joint community becomes aware of USAF mobility expert's capabilities, the demands for these capabilities will become greater. As the demand for mobility expert participation expands, the USAF must train more of its forces to support HA/DR crises. Through the discussions—both in this paper and the positions of experts in the HA/DR field—it is evident that the HA/DR environment is unique enough to warrant specialized training. Achieving the two objectives of this paper leads the author to recommend that through increased training opportunities, the USAF

must prepare its mobility forces with the needed KSAs for the HA/DR environment. This can be achieved by focusing training for key personnel in four broad areas.

- 1) USAF mobility experts must gain a cognitive understanding of the cultural differences surrounding the key players; namely the hundreds of IO/NGO, involved in operations as well as the culture which makes up the humanitarian environment.
- 2) USAF mobility experts must understand the unique structure and coordination processes inherent in a JTF established for a HA/DR operation.
- 3) USAF mobility experts must have a greater understanding of the economics, culture, climate, and social norms of the region.
- 4) USAF mobility experts should expand their core competencies to include those KSAs necessary to operate in an environment largely influenced by the IO/NGO community.

While development of KSAs specific to the HA/DR environment requires unique investments, these KSAs are synergistic with the USAF's core competency of rapid global mobility (Lembert and Wolf, 1993:25). Since it is almost unfathomable to envision a US military engagement without other government agencies, IO/NGOs, and foreign militaries, the four KSAs outlined above can and will be used to support the JTF operation.

The USAF should by no means replace the skills the other services bring to the table but should instead complement them by developing skills that enhance overall integration of airlift forces into a HA/DR operation. Now that

these four areas have been presented, it might be helpful to introduce how these KSAs can be obtained. The next section will briefly address where USAF mobility experts can obtain this training.

7.1 Availability of Training for USAF Mobility Experts

The terms education and training are often used synonymously, but there is a difference: training is designed to transfer practical skills, knowledge, and understanding about specific topics, whereas education provides higher order cognitive skills, which enable individuals to analyze, evaluate and synthesize broader concepts and ideas. Most military courses tend to include elements of both education and training regardless of their title (Tomlinson, 2000:69).

Providing USAF personnel with an adequate understanding of the KSAs that facilitate efficient and effective airlift during a humanitarian crisis is both a training and education process. These KSAs can be gained through career development courses, specialty training courses, pre-deployment training packages, and multi-agency training exercises involving the UN, foreign nations, and IO/NGO players. While there maybe great consternation over the focus of military training, providing a cadre of USAF mobility forces with a unique set of KSA tailored for the HA/DR environment will yield dividends to the JTF commander and the international community. The four areas that make up the unique KSAs can be gained through courses provided by both the military and civilian communities.

All the military service schools provide courses on HA/DR. However, the courses do little more than provide a cursory overview of CMO and descriptions of the IO/NGOs laid out in the Joint Publications (ACSC, 2000:no-page). These

courses serve their purpose of exposure, but they do little to strengthen the capabilities USAF mobility forces need to bring to the JTF's disaster response. SOCOM takes the lead in CMO training and execution. Turning to SOCOM's training as a template will assist USAF development of KSAs for HA/DR operations.

The Air Force Special Operations School (AFSOS) at Hurlburt Air Force Base, Florida, provides courses ranging from one to three weeks on foreign area orientation, which provide students an understanding of governments, cultures, and customs particular to certain regions (AFSOS Syllabus, 2001: 33-38). They have also begun a new 5-day course entitled the Joint Civil-Military Operations Course (JCMOC) focused on "educating students on how to effectively plan and coordinate civil-military operations across the range of military operations in support of the JTF campaign" (JCMOC Syllabus, 2001; n-page). The target audience is the officer/NCO/warrant officers likely to deploy to support CMO as well as members of government and non-government agencies that participate in humanitarian assistance/disaster response (JCMOC Syllabus, 2001:no-page).

The AMWC offers a two-week classroom and field course supporting the concept of the lead mobility wing (LMW). This course presents a classroom overview of the issues facing deployed forces such as base operations, force protection, and interaction with the IO/NGO community. This course allows airmen to address issues they will face and work on skills they will need during deployed operations.

The US Senate's direction to establish the Center of Excellence (COE) in Disaster Management and Humanitarian Assistance under Pacific Command (PACOM), Honolulu, HA, suggests that the military will further engage in HA/DR. The COE trains DoD personnel—military and civilian—for cooperation with the humanitarian community by offering a number of courses designed to educate and train the JTF staff on HA/DR operations (COE, 2001:n-page). One of the many courses they offer is the Combined Humanitarian Response Training (CHART) course for those about to deploy for HA/DR. The course is 5-days long and focuses on multi-service operations as well as cooperation issues with the IO/NGO community. The CHART is an introductory course designed to provide basic information about complex contingency operations in an international arena to US military service men and women. The Center also offers a shorter, customized version of the CHART course called the Training Assistance Program (TAP). Any portion from the current CHART course can be selected, and additional information can be substituted to specifically meet mission requirements. Based on its mission or objectives, the host organization selects the curriculum.

Coupling this military training to that offered in the civilian arena will provide a broad spectrum of exposure and understanding of the cultural differences between the military and humanitarian community and provides a greater ability to function within the HA/DR environment. OFDA provides a two-week field-training course for its DART members. While the full course may exceed USAF requirements, there are several areas of study within the course

that may provide an excellent source of information (Owens, 2000:Interview). Finally, the United Nations and North Atlantic Treaty Organization (NATO) provide 5-day orientation courses in Civil-Military Co-Operation (CIMIC), which are similar in form and function to the US military's CMO. According to Lt Col O'Brien, a veteran of three CIMIC training courses, the UN CIMIC training is as much a course as it is a philosophy. A UN representative serves as a facilitator to discussions led by the course attendees, who are made up of a very broad range of military, government, and IO/NGO representatives from around the world (O'Brien, interview). The NATO training educates its attendees on the CIMIC relationship as it pertains to the national alliances and the international community's humanitarian objectives (Gray, 2000:Interview).

There has been a noticeable growth of courses offered by both the military and civilian communities with the key objective of enhancing relationships and the synergistic effects of military and IO/NGO operations within HA/DR. The above list of courses provides only part of the training picture for USAF mobility experts. These experts must also participate in exercises that focus on HA/DR both at training centers and in the field. The after action reports from Operations PROVIDE COMFORT, PROVIDE PROMISE, SUPPORT HOPE, and Hurricanes Mitch and George recommended increased training with the IO/NGO community in an effort to build unity of effort and create greater synergy in the overall humanitarian response. Along with the growth of literature, the military has begun investing in computer and field exercises focused on peace-keeping and HA/DR operations. In 2001, the UN and many of the larger IO/NGOs

participated in four major US military field exercises within the EUCOM and PACOM areas of operations (Williamson, 2001:Interview). The Warrior Preparation Center in Einseidlerhof Germany and the Joint Warfare Center (JWC) in Norfolk VA, have made inclusion of US government and IO/NGO representatives common practice for a majority of their computer simulation exercises (Wehrle, 2000:Interview;JWC, 2000:Presentation)

7.2 Recommendations for Further Research

This research thus far has highlighted two questions that require further study. The first is “What forces should be train in theses KSAs for deployment into a HA/DR,” and second, “Is the current USAF structure adequate to support the revolution in HA/DR that the US military and specifically the USAF will find itself entering into in the coming decades?”

Targeting the correct USAF mobility experts. The USAF has shown it has more capacity to do HA/DR than originally thought, but airman need to be more familiar with HA/DR operations and coordination with the humanitarian community (Owens, Nov 2000). As this research paper implies in chapter one, greater training in the field of HA/DR must be offered to those USAF mobility experts who operate at the tactical level. Since training all mobility forces who deploy to crises is impractical—JTF-AR had over 700 personnel deployed to the operation—then training must be targeted at those key mobility experts who will directly influence the success of the JTF. Recommendations from those interviewed for this research paper ranged from a very narrow perspective—key

leaders—to those operating hand-in-hand on the flight line with the humanitarian community.

According to Col Gilbert, the most important people who need these KSAs are the JTF/CC, the J-3, the DIRMOBFOR, and the members who serve in the humanitarian coordination operations such as the HAST or CMOC. It is then the responsibility of these individuals to provide leadership to enable the remainder of the JTF staff and subordinate units to operate more effectively in the HA/DR environment (Gilbert, 2001:Interview). The theater CINCs have taken this one step further by preparing those individuals from their staffs who will fill key positions of on the JTF staff. In general terms, the theater commands are more geared to JTF support today. The commands have established mobility position within the J-3/J-4/J-5 directorates designated as the Deployable JTF Augmentation (DJTFAC). These personnel will contribute in the preparation of COAs for the JTF and then forward deploy as members of this staff (Cobb, 2001:interview).

While the theater CINCs function in a joint role and must designate DJTFAC according to all potential scenarios, there is a danger that USAF mobility experts may not be designated in DJTFAC positions or trained for potential deployment. USAFE has identified this weakness and designated 3 AF as the key coordination and deployment element for USAF mobility experts within EUCOM. Currently, however, 3 AF is the only NAF that has this mission and is pursuing specialized training.

Finally, to target only those individuals who serve in staff roles fails to adequately prepare those mobility experts who quite frequently have greater contact with the IO/NGO community than the players mentioned above. As indicated by Capt Lee and Maj Mauchly, the TALCEs, CRGs and other transportation coordination elements must have a significant understanding of all four KSAs addressed in chapter six. According to Lt Gen Wehrle, the AF has a deficiency in CMO. Each NAF, AMOS, and CRG should have some members trained in CA (Wehrle, Nov 2000).

Those individuals mentioned above provide only a brief overview of mobility experts the USAF should target for training. More research is required to find out what the best mix of trained experts should be.

Building a structure to support relief operations. A second question arises from this research as to the best structure for the USAF to use when supporting relief operations. IDA presents the notion that the US military should establish pre-designated HA/DR JTFs with pre-designated commanders, headquarters and tasked units to support the JTF (Lidy, 2001:III-17). While this has been argued before by such notable individuals as Samuel Huntington, the military and many others in the national defense arena believe we would be moving too far away from our primary mission to fight and win our nation's wars (Ayers, 1996:4). Col Voorhees, a veteran of a number of domestic and foreign disaster operations, agrees with IDA that the military needs to make a change to our current HA/DR structure. He believes that our failure to adequately prepare for these missions has cost valuable time and wasted limited resources. He

believes that the military should take the initiative to reduce the crisis response within time when they are tasked to support these operations (Voohrees, 2001:Interview). A pre-established JTF would succeed in doing this. The Canadian military currently has a standing JTF for HA/DR operations which could be investigated (Kunder, 2001:Interview).

The Scientific Advisory Board presented a second option to AMC in June 2000. Their recommendation was to examine the role of the 21st and 15th Air Forces to see if they are best equipped to be lead NAFs for HA/DR operations (Bence, 2000:Correspondence). Since Air Mobility Operations Groups--AMC's front line organization for rapid global mobility—are assigned to these NAFs, they may be adequately prepared to take over this role. A modification of this option is to designate a HA/DR NAF for each theater CINC—EUCOM would maintain 3 AF, PACOM would designate 13 AF in Guam, CENTCOM would designate 21 AF at McGuire AFB, and SOUTHCOM would designate 15 AF at Travis AFB. This would require the transfer of 21 AF and 15 AF from AMC to these respective theater CINCs.

Finally, the argument for AMC being designated the lead by USAF for all HA/DR operations worldwide has been presented (Boots, 2001:Interview). While this could be beneficial since airlift—whether strategic and tactical—is generally heavily involved in every HA/DR, the theater CINCs maybe unwilling to surrender control of operations in their theaters to an outside military organization.

In closing, the future success of US military operations in the HA/DR crises depends on our willingness to prepare for these operations. According to Andrew Natsios, head of USAID:

Success in such operations will be determined by the degree to which all the players can step outside of their individual cultures and value systems, surrender some of their autonomy and seek the best rather than the worst in those they must solve the problems they will confront in a humanitarian emergency. Planning, training, exercises, application of operational lessons learned—all can contribute to improved understanding and eventually improved execution of relief response where millions of lives are at risk (Natsios, 1997:17).

This research paper presented the case that USAF mobility experts play an integral part in the success of a HA/DR JTF. Whether leading the operation, as was the case in JTF-AR or supporting the Army or Marine Corp, USAF mobility experts must be prepared and ready to effectively and efficiently employ airlift assets in a HA/DR operation. The culture associated with the IO/NGO community and the HA/DR environment, the requirements of an HA/DR JTF, characteristics of the region of operations, and unique demands beyond mobility experts current core competencies mandates specialized KSAs to complement those KSAs USAF mobility experts current posses. This specialized KSAs can only be gained through the right training targeted at the right mobility experts. Much can be learned from 3 AF on how this can be achieved. Third Air Force has focused on obtaining the unique KSAs and validated this training through their success during JTF-AR. Their training plan provides an excellent template for the USAF to build upon to train additional mobility experts for HA/DR operations.

Appendix A Exploratory Surveys

THE TRAINING OF AIRLIFT EXPERT FOR INTEGRATION INTO HUMANITARIAN CRISES—CIVILIAN AGENCY

Foundation: This graduate research project (GRP) proposes that the U.S Air Force (USAF) should train its mobility forces in civil-military operations to help provide more effective and efficient integration of strategic and theater airlift support during humanitarian assistance/disaster response (HA/DR) missions.

Mobility Forces are defined as those personnel who currently or previously operated USAF airlift aircraft or who have supported these aircraft through their scheduling or their ground operations.

PERSONAL INFORMATION FOR CIVILIAN AGENCY

What is your current position in your military organization?

What experience have you had with the humanitarian crises?

How long have you been working in the arena of humanitarian crises?

What personal training with US military agencies had you received prior to working in HA/DR?

USAF IN HUMANITARIAN OPERATIONS

If you served on the joint task force (JTF) staff or in a humanitarian coordination center during an HA/DR, were USAF mobility forces participate in either of these arenas? If so, in what capacity did USAF members serve?

If USAF mobility forces were not involved in the humanitarian crises do you feel they could have contributed to the overall effectiveness of the operation?

Would USAF mobility forces participation have been useful in?

1. Coordinating logistics,
2. Slot times for strategic and theater aircraft?
3. Providing insight into operational capabilities?

Do you foresee greater participation of USAF mobility forces in future humanitarian crises?

Do you believe your prior experience in working with NGO/PVO/IOs complements any future experiences you may have in humanitarian operations?

USAF TRAINING INFORMATION

Do you believe the inclusion of USAF mobility forces into the humanitarian coordination centers or JTF staff would contribute to the success of theater HA/DR logistics?

If USAF mobility forces were to be trained to work with the UN/NGO/PVOs prior to being assigned to working on a JTF staff or with humanitarian organizations do you believe the humanitarian response would be more successful organization?

What are the three greatest strengths trained USAF mobility forces would bring to HA/DR operations?

What humanitarian specific training, other than direct military airlift training if any, should USAF mobility forces have before working in a HA/DR response?

Should prior training with NGO/PVOs or the UN be required before working on the JTF staff or in any other civil-military coordination capacity?

Should USAF mobility forces pursue training with non-US military agencies (NGO/PVO/UN and foreign military) in exercises or training sessions to facilitate integration during crises?

Should the USAF form new organizations to organize train and equip mobility forces to work within the civil-military operations, or should existing organizations take on this new role (AF ONLY).

Are there any other comments or recommendations you would like to make pertaining to the Air Force, humanitarian operations?

THE TRAINING OF AIRLIFT EXPERT FOR INTEGRATION INTO HUMANITARIAN CRISES—MILITARY AGENCY.

Foundation: This graduate research project (GRP) proposes that the U.S Air Force (USAF) should train its mobility forces in civil-military operations to help provide more effective and efficient integration of strategic and theater airlift support during humanitarian assistance/disaster response (HA/DR) missions.

Mobility Forces are defined as those personnel who currently or previously operated USAF airlift aircraft or who have supported these aircraft through their scheduling or their ground operations.

PERSONAL INFORMATION FOR MILITARY AGENCY

What is your current position in your military organization?

What experience have you had with the humanitarian crises?

How long have you been working in the arena of humanitarian crises?

USAF IN HUMANITARIAN OPERATIONS

If you served on the joint task force (JTF) staff or in a humanitarian coordination center during an HA/DR, were USAF mobility forces participate in either of these arenas? If so, in what capacity did USAF members serve?

If USAF mobility forces were not involved in the humanitarian crises do you feel they could have contributed to the overall effectiveness of the operation?

Would USAF mobility forces participation have been useful in?

1. Coordinating logistics,
2. Slot times for strategic and theater aircraft?
3. Providing insight into operational capabilities?

Do you foresee greater participation of USAF mobility forces in future humanitarian crises?

Do you believe your prior experience in working with NGO/PVO/IOs complements any future experiences you may have in humanitarian operations?

USAF TRAINING INFORMATION

Do you believe the inclusion of USAF mobility forces into the humanitarian coordination centers or JTF staff would contribute to the success of theater HA/DR logistics?

If USAF mobility forces were to be trained to work with the UN/NGO/PVOs prior to being assigned to working on a JTF staff or with humanitarian organizations do you believe the humanitarian response would be more successful organization?

What are the three greatest strengths trained USAF mobility forces would bring to HA/DR operations?

What humanitarian specific training, other than direct military airlift training if any, should USAF mobility forces have before working in a HA/DR response?

Should prior training with NGO/PVOs or the UN be required before working on the JTF staff or in any other civil-military coordination capacity?

Should USAF mobility forces pursue training with non-US military agencies (NGO/PVO/UN and foreign military) in exercises or training sessions to facilitate integration during crises?

Should the USAF form new organizations to organize train and equip mobility forces to work within the civil-military operations, or should existing organizations take on this new role (AF ONLY).

Are there any other comments or recommendations you would like to make pertaining to the Air Force, humanitarian operations?

END NOTES

1. Frederick C. Cuny was a passionate humanitarian who disappeared under mysterious circumstances in Chechnya in 1995. Rick Hill and Pat Reed worked diligently with many others in the humanitarian field to complete the book Cuny had begun following his death. Mr. Cuny's works effected hundreds of thousands of injured and despondent refugees throughout the world. It was the dream of the authors and many others that Fred Cuny's work continue to have significant impact the humanitarian community.

2. In 2001, Dr Robert Sligh, 3AF Historian, produced a comprehensive case study entitled JTF ATLAS RESPONSE. Through pain staking research, Dr Sligh conducted numerous interviews and collected hundreds of documents in development of an HTML based CD-ROM documenting the entire operation beginning in mid-January 2000 and finishing in mid-May 2000. While the author tried to build a case study specifically applicable to the research study it falls well short of the excellent work done by Dr Sligh.

BIBIOGRAPHY

- Aall, Pamela, Miltenberger Daniel, and Weiss, Thomas. Guide to IGOs, NGOs, and the Military in Peace and Relief Operations, United States Institute of Peace Press, Washington DC, 2000.
- Air Command and Staff College Distance Learning. Air Command and Staff College. CD ROM 2.2, Maxwell AFB, AL, Aug 2000.
- Arnold, Lindsey A. Cooperation or Conflict: The interaction of US Military Forces and Nongovernmental Organizations in Military Operations Other Than War. Army Command and General Staff College, Fort Leavenworth KS, 1996 (ADA312210).
- Ayers, James R. Military Operations Other Than War in the New World Order: An Analysis of Joint Doctrine for the Coming Era. AFIT/GMO/LAL/96J-1, Air Force Institute of Technology Wright-Patterson AFB, OH, May 1996 (ADA 309987).
- Baltazar, Thomas P. Lieutenant Colonel, US Army. Office of the Deputy Assistant Secretary of Defense for Peacekeeping and Humanitarian Affairs, Pentagon, Alexandria, VA. Personal Interview. 7 December 2000.
- Battistoni, Paula. Office of the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict, Division of Peacekeeping and Humanitarian Assistance (PK/HA). Pentagon, Alexandria, VA. Personal Interview. 9 November 2000.
- Bence, Christopher, Lieutenant Colonel. Plans and Programs, Air Mobility Command. Scott Air Force Base, IL. Correspondence. 30 August 2000.
- Black, Thomas, Captain. Flight Commander, 37th Airlift Squadron, Ramstein AB, Germany. Personal Interview, 17 April 2001.
- Byman, Daniel and others. Strengthening the Partnership: improving Military Coordination with Relief Agencies and Allies in Humanitarian Operations. RAND Publishing, Santa Monica, CA, 2000.
- Bradford, Gerard, III. Director, Center of Excellence in Disaster Management and Humanitarian Assistance. US Pacific Command, Triple Army Medical Center, Hawaii. Personal Interview. 7 February 2001.

- Bruno K.E. The Regional Civil-Military Operations Center: A Force Multiplier in Military Operations Other Than War. Naval War College, Newport Rhode Island, February 1999 (ADA 3633176).
- Burns, Jonathan M. Deputy Inspector General, United States Army Special Operations Command (Airborne) Ft Bragg, NC and Director Civil-Military Operations Center, Joint Special Operations Task Force, Beira, Mozambique, Correspondence, 2 March 2000.
- Cassidy, Michael, Lieutenant Colonel, commander, 37 Airlift Squadron and Commander, Expeditionary Operations Group, Joint Task Force-ATLAS RESPONSE, Ramstein AB, Germany, 9 May 2001.
- Center Of Excellence in Disaster Management Humanitarian Assistance, Home page. Excerpt from <http://coe-dmha.org/websites/index.htm>. 27 May 2001.
- Cobb, Carl. Training Advisor, Center of Excellence in Disaster Management and Humanitarian Assistance, US Pacific Command, Triple Army Medical Center, Hawaii. Briefing to Advanced Study of Air Mobility Class and Personal Interview, 7 February 2001.
- "Civil-Military Operations in Joint Task Force Operations," excerpts from the world wide web. <http://carlisle-www.army.mil/usacsl/division/pki/military/cmoinjtf.htm>. no-date.
- Cuny, Frederick C. Famine, Conflict, and Response: A Basic Guide. West Hartford Conn, Kumarian Press. 1999.
- Department of Defense, Joint Staff. Joint Publication 3-0, Doctrine for Joint Operations. Point Pub 3-0, Washington DC: Joint Chiefs of Staff, 1 February 1995.
- Department of Defense, Joint Staff. Joint Publication 3-07, Joint Doctrine for Military Operations Other than War. Point Pub 3-07, Washington DC: Joint Chiefs of Staff, 16 Jun 1995.
- Department of Defense, Joint Staff. Joint Publication 3-07.3, Joint Tactics, Techniques and Procedures (JTTP) for Peacekeeping Operations. Point Pub 3-07.3 Washington DC: Joint Chiefs of Staff, 12 February 1999.
- Department of Defense, Joint Staff. Joint Publication 3-08, Interagency coordination for Humanitarian Assistance, Vol. I and II. Point Pub 3-08 Washington DC: Joint Chiefs of Staff, 9 October 1996.

Department of Defense, Joint Staff. Joint Publication 3-57, Joint Doctrine for Civil-Military Operations. Joint Pub 3-57 Washington DC: Joint Chiefs of Staff, 8 February 2001.

Department of Defense, Joint Staff. Joint After Action Reporting System, Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3150.25, Washington DC, Joint Chiefs of Staff, 25 August 1997.

Department of the Air Force, Air Force Doctrine Document 2, "Organization and Employment of Aerospace Power, Washington DC: HQ USAF, 17 February 2000.

Department of the Air Force, Air Force Doctrine Document 2-3, "Military Operations Other Than War, Washington DC: HQ USAF, 3 July 2000.

Department of the Army United States Army Field Manual 100-23-1, Multiservice Procedures for Humanitarian Assistance Operations. FM 100-23-1, US Army Training Center and Doctrine Command, Fort Monroe, Virginia, (<http://www.adtdl.army.mil/cgi-bin/atdl.dll/fm/100-23-1/toc.htm>). 31 October 1994.

Doan, Gilbert. Director Joint Civil-Military Operations Course, Joint Special Operations University, Hurlburt Field, FL. Correspondence, 6 March 2001.

Dreyer Stephen, Lieutenant Colonel, Chief of A-3, Operations Directorate and Team Chief, Humanitarian Assistance Survey, Joint Task Force-ATLAS RESPONSE, Third Air Force, RAF Mildenhall United Kingdom. Personal Interview, 30 Apr 2001.

Dye, Steven C. Improving African Fuel Availability in Support of Humanitarian Relief Operations. Air Force Institute of Technology (AU), Wright-Patterson AFB, OH, 1999 (AFIT/GMO/LAC/99E-3).

Ecker, Steven D. Lieutenant Colonel. Chief, Civil Affairs Headquarters, US Pacific Command, J-322. Personal Interview. 8 February 2001.

Federal Foreign Disaster Response Plan (FFDRP) (Draft). Pentagon, Arlington VA, 19 October 2000.

General Accounting Office (GAO). Department of Defense Humanitarian and Civic Assistance Program. Washington D.C: GAO Printing, 2 November 1993.

- Gilbert, Taco, "JTF-ATLAS RESPONSE DIRMBOFOR After Action Report"
Department of the Air Force, Headquarters, 436 Airlift Wing (AMC) DE,
4 May 2000.
- Gilbert, Taco, Colonel. Commander 436th Airlift Wing, Air Mobility Command,
and Director of Mobility Forces for Joint Task Force—ATLAS RESPONSE,
Discussion with Advanced Study of Air Mobility students. Air Mobility
Warfare Center, Fort Dix, New Jersey, 13 July 2000 and Telephone
Interview. 27 April 2001.
- Gilhool, Timothy M. Strong Support and Expeditionary Standards: A Brief History
of Joint Task Force Aguila. 1999.
- Gray, Michael. Staff Officer, Directorate of Population, Refugees, and Migration,
Department of State, Washington D.C. Personal Interview. 14 September
2000.
- Greco, Thomas C. Unity of Effort In Peace Operations. Army Command and
General Staff College, Fort Leavenworth, KS, 1996 (ADA309917).
- Haulman, Daniel L. The United States Air Force and Humanitarian Airlift
Operations 1947-1994. Air Force History and Museum Program,
Washington DC, 1998.
- Hinson, David R. U.S. Military Interaction with Humanitarian Assistance
Organizations During Small-Scale Contingencies. Air Command and Staff
College, Maxwell AFB, AL, March 1997 (AU/ACSC/119/1998-04).
- Holder, Thomas V. SRA International, Senior Military Analyst, Joint Staff J-4.
Pentagon, Alexandria, VA. Personal Interview. 14 September 2000.
- Hooker, David Jr., and Lange John E. "Military-civilian cooperation and conflict in
humanitarian assistance missions" Parameters 028, Carlisle Barracks
(Autumn): 136.
- Informal Humanitarian Assistance Working Group (IHAWG), Joint Chiefs of Staff.
Pentagon, Alexandria, VA. Personal Attendee. 8 December 2000.
- Joint Civil Military Operations Course (Level II) (JCMOC) , United States Air
Force Special Operations School, Hurlburt Field, excerpts from the world
wide web. <http://www.hulbert.af.mil/usafsos>.
- Jury, Allen. Director of Policy, Planning, and Research, Directorate of
Population, Refugees, and Migration, Department of State. Washington
D.C. Personal Interview. 8 November 2000.

- Jury, Allen. Director of Logistics, United Nations World Food Program, Rome, Italy. Personal Correspondence. 14 April 2001.
- "Improving Coordination of Humanitarian and Military Operations", United States Department of State Bureau of Intelligence and Research, excerpts from conference held 23 June 1994
- "International Association of Peacekeeping Training Centres (IAPTC)", Peacekeeping & International Relations 27, p 23, Jul-Oct 98.
- Irvin, Patricia. "Strategy for Humanitarian Intervention." Address by Deputy Assist Director of Defense Humanitarian and Refugee Affairs to James E Smith Midwest Conference on World Affairs, 9 October 1994.
- Kunder, James. Adjunct Research Staff Member, Operational Evaluation Division, Institute for Defense Analyses, Alexandria, Virginia. Former Director, Office of Foreign Disaster Assistance. Discussion with Advanced Study of Air Mobility students. Air Mobility Warfare Center, Fort Dix, New Jersey. 6 September 2000, and Personal Interview 27 February 2000.
- Ladnier, Ronald R., Colonel. International Security Policy, Bureau of Political-Military Affairs, Department of State. Briefing to Advanced Study of Air Mobility Class. Air Mobility Warfare Center, Ft Dix, NJ. 6 September 2000.
- Lange, John E. "Civilian-Military Cooperation and Humanitarian Assistance: Lessons from Rwanda. Parameters: Journal of the US Army War College, 28, Carlisle Barracks. (Summer 1998): 106-122
- Lee, Timothy, Captain. Director, Air Mobility Operations Course. Air Mobility Warfare Center, Ft Dix, NJ. Personal Interview. 31 May 2001.
- Lembert, R., Lewis, D., Wolf, B., and Bitzinger R. Air Force Noncombat Operations: Lessons From the Past, Thoughts for the Future. RAND Publishing, Santa Monica CA., 1992.
- Leshan, Nick Letoluo. The Role of Air Power in Humanitarian Operations. Defense Technical Information Center, FT Belvoir, VA, 1998 (ADA340917).
- Lewis, Commander Brian L. Humanitarian Assistance Coordinator, International Security Operations, Bureau of Political-Military Affairs, Department of State. Washington D.C. Personal Interview. 9 November 2000.
- Lidy, A. Martin, Cecil, M. Michele, Kunder, James, and Packer, Samuel H.

- Effectiveness of DoD Humanitarian Relief Efforts in Response to Hurricanes George and Mitch. IDA Paper 35-60, Institute for Defense Analysis (IDA), Alexandria, VA. 2001.
- Lowe, Christian, "General Offers Glimpse Into Humanitarian Missions," Defense Week, (12 February 2001). 16.
- Martinson, Jon L. "Joint Task Force Provide Relief DIRMBOFOR End of Tour Report." Department of the Air Force, Headquarters 463rd Airlift Wing (AMC), 12 May 1992.
- Mauchly, Thomas Major, Air Mobility Operations Course (AMOC) presentation to the students of the Advanced Study of Air Mobility, Air Mobility Warfare Center, Ft Dix NJ, 7 Jun 2000.
- McCarthy, Paul A. Operation Sea Angel: A Case Study. RAND Corporation, Santa Monica, CA, 1994.
- McGoldrick, Jamie. Humanitarian Affairs Officer, Office for the Coordination of Humanitarian Affairs, United Nations, New York, NY. Personal Interview. 4 January 2001.
- Mehall, Greg. Civil Affairs Officer, Special Operations Command Europe, Vienligen Germany. Personal Correspondence
- Miller, John W. Chief, Civil Affairs Division, Headquarters US Army Pacific, Fort Shafter, HI. Personal Interview. 7 February 2001.
- Monroe, Douglas J. Operation Fuerzas Apoyando (OPORD 6150-98), JTF-Aguila, Hurricane Mitch Disaster Relief Operation Department of the Army 350 Civil Affairs Command, Pensacola, FL, 12 February 1999.
- Natsios, Andrew S. U.S. Foreign Policy and the Four Horsemen of the Apocalypse. Westport, Connecticut, Preager, 1997.
- North Atlantic Treaty Organization Resolution AJP-09, (Draft). "NATO Civil-Military Co-Operation (CIMIC) Doctrine." Mons, Belgium, September 2000.
- O'Brien, Michael, Lieutenant Colonel. International Relations Directorate. Civil-Military Operations Center Assistant Director, Joint Task Force—ATLAS RESPONSE. Third Air Force, RAF Mildenhall UNITED KINGDOM Correspondence 27 April 2001 and Personal Interview 30 April 2001.
- Office of U.S. Foreign Disaster Assistance, Annual Report FY1999. U.S. Agency for International Development. Washington D.C. 1999.

Office of the Coordination for Humanitarian Affairs (OCHA). Report on the United Nations Role In Coordinating and Mobilising Humanitarian Assistance To Mozambique Following the Devastating Floods., June 2000.

Otte, John. Education and Training Program Manager, Center of Excellence in Disaster Management and Humanitarian Assistance. US Pacific Command, Triple Army Medical Center, Hawaii, Briefing to Advanced Study of Air Mobility Class. 7 February 2001.

Owens, Richard L. Office of Foreign Disaster Assistance, US Agency for International Development. Washington D.C. Personal Interview. 9 November 2000.

Pacific Center of Excellence Orientation Briefing to Advanced Study of Air Mobility Class, Triple Army Medical Center, HA. 7 February 2001.

Perry, Walt L., Schrader, John Y., Wilson Barry M. A Variable Resolution Approach to Modeling Command and Control in Disaster Relief Operations. RAND Publishing, Santa Monica, CA, 1993.

Schroeder, Daniel R, Lieutenant General. Joint Forces Commander for Operation SUPPORT HOPE. Discussion with Advanced Study of Air Mobility students. Air Mobility Warfare Center, Fort Dix, NJ. 6 September 2000.

Seiple, Chris. Square-Dancing into the Future: The US Military/NGO Relationship and the CMOC in Times of Humanitarian Intervention. Naval Post Graduate School, Monterey CA, December 1995 (ADA305102).

Shestack, Laurie Lerner. Humanitarian Affairs Advisor, US Mission to the U.N. New York, NY. Personal Interview. 4 January 2001.

Shirley, Michelle. Office of the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict, Division of Peacekeeping and Humanitarian Assistance Pentagon, Arlington VA. Personal Interview. 21 September 2000.

Sligh, Robert Phd. JTF- ATLAS RESPONSE. Produced by the Third Air Force CD-ROM. RAF Mildenhall, United Kingdom, April 2001.

Sligh, robert Phd. Historian, Third Air Force, RAF Mildenhall, United Kingdom. Correspondence. 7 March 2001.

Smith, Neil Lieutenant Colonel. Director of Operations, Air Mobility Support

- Squadron, McGuire AFB and Chief Air Mobility Division Joint Task Force—ATLAS RESPONSE, McGuire AFB, NJ. Telephone Interview. 25 May 2001.
- Smith, Peter D. R. Director, Multilateral and Humanitarian Affairs, National Security Council, White House, Pentagon, Arlington, VA. Personal Interview. 7 December 2000.
- Switzer, Warren H. "Distributed Training and Distribution Simulation: Imperatives for Success in Military Operations Other than War." AB Technologies Inc. Alexandria, VA, no date.
- Tedesco, Joseph Colonel. Deputy Director, International Logistics Division, Joint Staff J-4. Pentagon, Arlington, VA. Personal Interview. 14 September 2000.
- Tomlinson, RK. Reversing the Downward Spiral: Exploring Cultural Dissonance Between the Military and NGOs on Humanitarian Operations. Department of Defence Management and Security Analysis, Royal Military College of Science, <http://www.jha.ac/ref/r040.pdf>, July 2000.
- Trader, Laura A., Jacobs, Betsey A., and Newett, Sandra L., "Task Development Guide for Humanitarian and Peace Operations," Center for Naval Analyses, Alexandria VA. Feb 1998.
- United Nations (UN) Orientation Briefings for the Advance Study of Air Mobility, Geneva SW, 14 May 2001
- United States Joint Forces Command (JFCOM) Joint Warfighting Center. Unpublished presentation to members of the Advanced Study of Air Mobility, 18 Sept 2000.
- United States European Command (EUCOM), Home Page. Excerpts from <http://www.eucom.mil/> 24 May 2001.
- United States Pacific Command (PACOM), Home Page. Excerpts from <http://www.pacom.mil/>. 24 May 2001.
- Weiss, Thomas, "Research Note about Military-Civilian Humanitarianism: More Questions than Answers, " Disasters, vol. 21, (1997) no-page.
- Wehrle, Joseph, Major General. Deputy Chief of Staff for Plans and Programs, US Air Force, Pentagon, Arlington, VA. Personal Interview.

17 November 2000.

White Paper. "Presidential Decision Directive-56 (PDD-56), The Clinton Administration's Policy on Managing Complex Contingency Operations," Pentagon, Arlington VA, May 1997.

Wilkins, Aaron L. The Civil Military Operations Center (CMOC) in Operation UPHOLD DEMOCRACY (Haiti) Air Command and Staff College, Maxwell AFB, AL. MAR H 1997 (AU/ACSC/0086/97-03).

Williamson, JS. "Revision of the Oslo Guidelines on the use of Military and Civil Defense Assets in Disaster Relief. Electronic message to the Joint Chiefs of Staff, 211545Z, 21 December 2000.

Williamson, John, Lieutenant Colonel. Department of Defense Humanitarian Affairs Liaison Officer, Military Representative to the US Mission, Geneva, Switzerland. Personal Interview 14 May 2001.

Van Zandt, Mark, Major. Director, Civil-Military Strategy for Internal Development Course, USAF Special Operations School Hurlburt Field FL. Personal Correspondence. 6 March 2001.

Voorhees, Brian, Colonel. Vice Commander, Air Mobility Warfare Center. Ft Dix, NJ. Personal Interview. 16 May 2001.

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 074-0188	
<p>The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p> <p>PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.</p>					
1. REPORT DATE (DD-MM-YYYY) Oct 01		2. REPORT TYPE		3. DATES COVERED (From – To) Jan 00- Jan 01	
4. TITLE AND SUBTITLE Preparing Air Force Mobility Experts for Humanitarian Assistance and Disaster Relief				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Thomas C. Gilster, Maj USAF				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAMES(S) AND ADDRESS(S) Air Force Institute of Technology Graduate School of Engineering and Management (AFIT/EN) 2950 HobsonStreet, Building 640 WPAFB OH 45433-7765				8. PERFORMING ORGANIZATION REPORT NUMBER AFIT/GMO/ENS/01E-04	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT <p>The US military's response to the devastation two cyclones levied on the South African nation of Mozambique-officially known as Joint Task Force-ATLAS RESPONSE (JTF-AR)-was a watershed event for U.S. Air Force (USAF) employment in disaster relief. The success of this Third Air Force-led JTF provides insight that training USAF mobility experts specifically for humanitarian assistance and disaster relief (HA/OR) enhances the timely attainment of the JTF's objectives and furthers the relief effort. This paper examines whether the USAF should pursue providing its mobility experts with the distinct knowledge, skills, and abilities (KSAs) needed to facilitate effective and efficient integration of airlift resources into HA/OR operations. This research indicate that the USAF should train its mobility experts to provide a greater understanding of: 1) the humanitarian environment and the players in it, 2) the roles and missions of a JTF established for HA/OR perations, 3) the culture, economics, and society of the region they could deploy to, and 4) the unique demands the HA/OR environment places on mobility experts and their core competency of rapid global mobility. These four areas constitute the KSAs unique to HA/OR operations and the key areas where USAF mobility forces should receive training to support HA/OR JTFs. Since it is almost unimaginable to envision a US military engagement that does not include government agencies, humanitarian aid agencies, and foreign militaries, these four KSAs outlined above will not only enhance a JTF focused on HA/DR, but they will also improve USAF readiness for any operation including war.</p>					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES 145	19a. NAME OF RESPONSIBLE PERSON Stephen P. Brady, Lt Col, USAF (ENS)
REPORT U	ABSTRACT U	c. THIS PAGE U			19b. TELEPHONE NUMBER (Include area code) (937) 255-6565, ext 4367; e-mail: Stephan.brady@afit.edu

Standard Form 298 (Rev. 8-98)

Prescribed by ANSI Std. Z39-18